# China Lake – Chapter 1

### Prologue

This is a bit of silliness just to fill my days. Someone asked for a story with characters that didn't have much, or any, money. Sharon and I have money, just not much. The story is purely for the fun of it. I contemplated what I would do if TSHTF, in real life.

Sitting in their improvised shelter in the corner of the lower level of their split-foyer, Tom wondered if his half assed, last minute preps would see them through. Sharon had just been shopping a day earlier and they had enough food for 3 months, possibly more. They had the package deal of radiation equipment from Texas that arrived a couple of months before. They had a camping potty with a seat and those plastic bags, and all of their camping gear including the Coleman stove and cookware had hurriedly been located and moved into the shelter. I'll tell you right now, Tom is me (Gary).

About two months earlier, the situation in the Far East heated up and the news media made it sound like the end of the world was coming. Anything edible went into that small shelter together with the extra batteries and such he'd picked up at Costco. The only generator he could find that they could afford had been a gasoline-fueled generator that was rated 9.1kw peak and 6.3kw average. But it would run for 13 hours on an 8-gallon tank of gas at 50% power. They lived in Ridgecrest, California, near the China Lake Naval Weapons Test Facility.

Timing wise, the news had come at a good time; they had the social security check, 2 pension checks and the balance of their trust fund account. In all, it was 5 grand in round numbers. They were current on their bills, so they didn't pay any, instead using the money to get prepared. The genset would run the refrigerator and freezer in the basement and they could empty the kitchen freezer to one of those.

Tom ordered 20 20-round magazines for a M1A standard model rifle plus 10 GI 7-round magazines for the .45 Auto and had them dropped shipped, overnight, to a non-California location and reshipped overnight to him. He also picked up 1,000 rounds of surplus 7.62×51mm for the M1A he ordered and 500 rounds of .45 ACP for the M1911 he used. As much as he dislike the 10/22, that's what he could get with 5 bricks of 40gr solid Golden Bullets and 36-grain hyper velocity Viper. His final weapon purchase had been the Mossberg 500 because he was running short on money and it was on sale for \$220. He bought 250 rounds of  $2\frac{3}{4}$ " 12-pellet 00 Express buckshot.

A surplus store provided him with a WWII flap holster and 2 double magazine carriers, 2 canteens, a cup, a stove, an ALICE harness and pistol belt plus 4 mag pouches that held 2 M14 mags each. She got the ALICE harness with pistol belt, 2 canteens, cup, stove and water tablets plus a holster to hold his .32 auto and 2 spare magazines.

The shelter was hastily constructed with plywood, 2x4s and sandbags. They brought their king sized mattress to the shelter and stood it on edge out of the way. Finally, they

added an AM/FM radio and water in a blue 55-gallon water drum. A 6' folding table and 4 folding chairs made up the other furniture. Sharon bought 10 of the cheapest 5-gallon gas cans she could find and they ended up with a full generator tank and 50 spare gallons of gas.

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Just two weeks ago, he'd finished up the shelter when the London Times reported Chinese ships leaving port. In Bangor, an observant reporter had somehow managed to catch one of our boomers setting out at a time when none were scheduled to sail. The Pentagon described the sailing as routine, but security at all of the military installations was higher than usual. After that, a National Security blanket was imposed on the news media. Then, the Director of FEMA changed the long-standing recommendation of keeping a 3-day supply of food and water to keeping a 14-day supply. The result was a run on the grocery stores and you couldn't find a 5-gallon gas can or portable generator to save your soul.

CNN started a special that was critical of the US policy of not maintaining the Civil Defense system. In 1961, President John F. Kennedy, sensing that the overwhelming majority of state and local governments were doing little, if anything, to develop a sheltering capability, decided to make civil defense preparedness a central issue. Kennedy separated out "civil defense" functions and other emergency preparedness functions into two agencies. Executive Order 10952 moved the CD functions into and Office of Civil Defense (OCD) within the Department of Defense, and assigned to the Secretary of Defense. A full-fledged nationwide shelter program, funded by the federal government was developed, resulting in engineering studies of existing structures, the acquisition and deployment of shelter stockpiles (i.e., the crackers and other goods one could find in the basements of these so-designated facilities). This moved "civilian" defense into the military arena, but it was widely believed that the Defense Department had the resources to undertake such a massive logistics program associated with the development of the sheltering program.

In 1979, President Jimmy Carter created the Federal Emergency Management Agency (FEMA), and consolidated several dozen, disparate emergency preparedness and civil defense functions into a single entity. Although that sounds efficient, many of these organizations continued to function as their own organization within the new agency, and for many years the "civil defense" and "national security" planners were distinct from those that assisted state and local governments in preparing for and responding to disasters. FEMA and its programs would become the basis for state and local emergency preparedness and civil defense programs for the next 20 years. As CNN went on to point out, in the process the US abandoned its Civil Defense Shelters.

Sharon and Tom were old enough to remember the shelter-building craze during the 1950s. Those were usually backyard shelters that weren't any bigger than the improvised shelter Tom had assembled. The government suggested that you stock them for a 2-week stay. That was wrong, they needed to be stocked for a 100-day stay, but it's

likely the government didn't really expect many people to survive anyway. That was the age of the bomber fleet, hundreds of B-47s and B-52s. When the Cuban Missile Crisis went down, the Air Force was building Titan missile facilities.

The Cold War had ended 15 years earlier in 1991 and Russia ceased to be a major concern. However, whenever the US lost an enemy, they seemed to gain a new one, this time the Chinese. During the first decade of the new Century, the Chinese had started building their fleet and buying things from Russia, probably using the Wal-Mart money. In a way, their timing was perfect. After the 9/11 attacks on the twin towers and the Pentagon, the US got embroiled in a war in Afghanistan and then that war in Iraq. Iraq had turned into another Vietnam when the insurgency arose. During the 3-week war to topple the Iraqi government, the US lost ~158 soldiers. Maintaining the 'peace' had required another 2,000 lives and the count kept growing.

Tom was old school. When the Commander in Chief made a decision, you backed it whether or not you agreed with it. You weren't supporting the decision; rather, you were supporting the troops. By 1/1/06, the US fatality count topped 2,400. Bush was catching hell from the media, the Democrats in Congress, a few Republicans and a growing segment of the population. His popularity was about the lowest of the 5 years he'd been in office. He'd announced troop reductions for 2006, but refused to give a number.

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In 2005, the Chinese and Russians had held joint exercises, downplayed in the media and by the government. The exercises, which began on August 18th and ran through August 25th, were named "Peace Mission 2005." They climaxed with amphibious and paratrooper landings and an aerial blockade at the Shandong Peninsula on the Yellow Sea. Some 10,000 troops, mostly Chinese and about 1,800 Russians, are taking part. The TU-22M3, aka Backfire C, was the Russian equivalent to the American B-1A bomber. China bought 40. The American B-1A had been scrapped and eventually replaced by the B-1B.

The first B-1A rolled out on October 26, 1974 and made its maiden flight on December 23, 1974. In 1974, AIL was awarded the development contract for the B-1 ECM system; the most comprehensive ECM program ever initiated. The development schedule was in excess of 4 years and was for a 77 Line Replaceable Unit (LRU) band 4 through 7 system. AIL Subcontractors included Litton, Sedco, Northrop, and Tasker. The third prototype, designed as an avionics testbed, carried the initial AIL AN/ALQ-161. By 1979, four prototypes had been constructed with the fourth vehicle representing a fully operational aircraft complete with electronic systems installed.

Production of an original quota of 244 B-1 aircraft was funded in the FY 1978 Defense Budget approved by the Ford Administration. On June 30, 1977, President Carter canceled the production of the B-1 as the priority shifted to the development of the cruise missile. AIL's development was only partially complete when the B-1 Program was terminated. High cost of the aircraft perhaps tempered with some lingering doubts regarding its ability to successfully penetrate enemy defenses were apparently reasons for the cancellation.

Cancellation led to new DOD studies designed to evaluate alternative aircraft to serve as cruise missile carriers. These studies yielded a B-1 derivative as a best candidate solution. Congress authorized and appropriated funding in the FY 1981 Defense Budget for a multi-role strategic bomber. The final USAF study led to the selection of the derivative B-1B as the nation's next strategic bomber.

The Rockwell design incorporated the FB-111 swing wing which provided both highand low-altitude performance. High-altitude flight was designed at Mach 2 plus and low altitude at high subsonic speed with supersonic dash capability. The weapons load was to be greater than the B-52 for nuclear bombs, conventional bombs, and SRAMs. The range was designed to be equivalent to the B-52 but with a lower total gross weight and a much shorter takeoff ground roll. This would have permitted much more flexibility in basing since the B-52 is limited by its heavy gross weight and long takeoff ground roll. The avionics systems were to be integrated and under the control of computer processors, a feature considered especially important for changing ECM systems computer programs that, in turn, could provide additional flexibility for continually modifying ECM gear with limited hardware changes. Space capacity was designed in for future modifications, and 244 B-l's were to be built. Four prototypes were developed, the B- 1A models.

The B-1A design includes four jet engines with afterburner, with two jet engines located under each wing root. The fuselage and wing are blended together, and the variable geometry allows a 15° wing sweep in the forward position and 67.5° when fully swept. The B-1A employs a sensor-controlled automatic system, using movable foreplane vanes to combat low-level turbulence. The three bomb bays are capable of carrying eight SRAMs or 25,000 pounds of nuclear or conventional bombs each. In addition, there are four external hard points each capable of carrying two SRAMs or 10,000 pounds of bombs. The B-1A has a crew of four: pilot, copilot, offensive systems operator, and defensive systems operator. Originally, the crew was in an escape module, but ejection seats were substituted to save cost and weight. The B-1A has a length of just over 150 feet, a wing span of 136 feet, 8.5 inches in a fully spread configuration and 78 feet, 2 inches in a swept mode, with a height of 33 1/4 feet, 7 inches. The maximum gross takeoff weight is 395,000 pounds. The engines have a self-start capability and, therefore, do not require cartridge start.

Alert reaction time for safe escape was to be a significant improvement over its predecessors. Terrain following radar would also enable the B-1A to fly at lower altitudes than the B-52, which relied upon a terrain avoidance system. Although President Carter canceled production of the B-1 in 1977, the flight-testing continued through 1981 with four prototypes. Cited by the President, as a principal reason for his decision was the high unit cost, which had grown from original estimates of \$30 million to \$100 million per aircraft. Consequently, the President elected to produce the ALCM, which was deemed less expensive. Also, the ALCM, with an RCS smaller by an order of magnitude, was considered less vulnerable to SAM defenses than the B-1.

The B-1B is a modified B-1A with major revisions in offensive avionics, defensive avionics, weapon payload, range, and speed. These modifications were made to incorporate certain technological advances that had occurred between the original B-1A contract award in 1970 and the LRCA competition in 1980. Improvements consist primarily of offthe-shelf technology such as a new radar, new generation computers, expanded ECM capabilities, reduced RCS, and avionics compatibility with the ALCM. The wing sweep is restricted to 60, which limits the maximum speed to just above supersonic. Rockwell also estimated range increases for the modified B-1.

Differences between the B-1B and its predecessor, the B-1A of the 1970s, are subtle, yet significant. Externally, only a simplified engine inlet, modified over-wing fairing and relocated pilot tubes are noticeable. Other less-evident changes include a window for the offensive and defensive systems officers' station and engine housing modifications that reduces radar exposure. The B-1B was structurally redesigned to increase its gross takeoff weight from 395,000 to 477,000 pounds (177,750 to 214,650 kilograms). Still, the empty weight of the B-1B is but 3 percent greater than that of the B-1A. This added takeoff weight capacity, in addition to a movable bulkhead between the forward and intermediate weapons bay, allows the B-1B to carry a wide variety of nuclear and conventional munitions. The most significant changes, however, are in the avionics, with low-radar cross-section, automatic terrain-following high-speed penetration, and precise weapons delivery.

During the Cold War, heavy bombers were used primarily for nuclear deterrence and were operated solely by the active duty Air Force. According to the Air Force, the National Guard's part-time workforce was incompatible with the bombers' nuclear mission because of a requirement for continuously monitoring all personnel directly involved with nuclear weapons. With the end of the Cold War and increased emphasis on the bombers' conventional mission, the Air Force initiated efforts to integrate Guard and reserve units into the bomber force. As part of its total force policy, the Air Force assigned B-1B aircraft to the National Guard. Heavy bombers entered the Air Guard's inventory for the first time in 1994 with a total of 14 B-1Bs programmed by the end of fiscal year FY 1997 for two units, the 184th Bomb Wing (BW), Kansas, and the 116th BW, Georgia. The 184th completed its conversion in FY 1996 at McConnell Air Force Base (AFB). Kansas. After a long political struggle that involved resisting the planned conversion from F-15s and an associated move from Dobbins AFB near Atlanta to Robins AFB near Macon, the 116th began its conversion on 1 April 1996. The unit completed that process in December 1998. All the bombers in both units were configured for conventional, not nuclear, missions.

By comparison, the TU-22M3 had 2 NK-25 turbojet engines generating 25,000kg thrust each, yielding a cruise speed of 900km/h and a maximum speed of 2,300km/h. It had an unrefueled operational range of 7,000km and was armed with: One to three H-22 missiles, six to ten H-15 missiles, 24,000 kg of 250-9,000kg free fall bombs and one

double-barreled GSH-23 (23mm) gun. Russia sold the Chinese the refueling probes that had been removed from the Backfire Cs. They also sold the Chinese 8 of the IL-78KM airborne tankers. The Midas is a three-point tanker probe and drogue based on (or converted from) the airframe of the IL-76MD military freighter, carrying a maximum payload of 48,000 kg.

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Mutual assured destruction (MAD) is the doctrine of military strategy in which a full scale use of nuclear weapons by one of two opposing sides would result in the destruction of both the attacker and the defender. It is based on the theory of deterrence according to which the deployment of strong weapons is essential to threaten the enemy in order to prevent the use of the very same weapons. It is also cited by gun control opponents as the reason why crime rates tend to be lower in heavily armed populations.

The doctrine assumes that each side has enough weaponry to destroy the other side and that either side, if attacked for any reason by the other, would retaliate with equal or greater force. The expected result is an immediate escalation resulting in both combatants' total and assured destruction. It is now generally assumed that the nuclear fallout or nuclear winter would bring about worldwide devastation, though this was not a critical assumption to the theory of MAD.

The doctrine further assumes that neither side will dare to launch a first strike because the other side will launch on warning or with secondary forces (second strike) resulting in the destruction of both parties. The payoff of this doctrine is expected to be a tense but stable peace.

The primary application of this doctrine occurred during the Cold War (1950s to 1990s) in which MAD was seen as helping to prevent any direct full-scale conflicts between the two power blocks while they engaged in smaller proxy wars around the world. It was also responsible for the arms race, as both nations struggled to keep nuclear parity, or at least retain second-strike capability.

Proponents of MAD as part of US and USSR strategic doctrine believed that nuclear war could best be prevented if neither side could expect to survive (as a functioning state) a full scale nuclear exchange. The credibility of the threat being critical to such assurance, each side had to invest substantial capital even if they were not intended for use. In addition, neither side could be expected or allowed to adequately defend itself against the other's nuclear missiles. This led both to the hardening and diversification of nuclear delivery systems (such as nuclear missile bunkers, ballistic missile submarines and nuclear bombers kept at fail-safe points) and to the former Anti-Ballistic Missile Treaty.

This MAD scenario was often known by the euphemism "nuclear deterrence". Critics of the MAD doctrine noted that the acronym MAD fits the word mad (in this context, meaning insane) because it depended on several challengeable assumptions: Perfect detec-

tion, perfect rationality and an inability to defend. The fall of the Soviet Union had reduced tensions between Russia and the United States and between the United States and China. Although the Bush administration withdrew from the Anti-Ballistic Missile Treaty in June 2002, the limited national missile defense system proposed by the Bush administration was designed to prevent nuclear blackmail by a state with limited nuclear capability and is not planned to alter the nuclear posture between Russia and the United States. Russia and the United States still tacitly hold to the principles of MAD. Doomsday clock: 2002 - Little progress on global nuclear disarmament; United States rejects a series of arms control treaties and announces its intentions to withdraw from the ABM Treaty; terrorists seek to acquire nuclear weapons. Clock changed to seven minutes to midnight (-2 change).

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Happy Nuke Year! The Cold War may be over, but the United States is still keeping its powder dry, spending billions of dollars annually to maintain and upgrade its nuclear forces. As of January 2006, the US stockpile contains almost 10,000 nuclear warheads. And the Bush administration's preemption policy – which allows for the quick use of nuclear weapons to destroy "time-urgent targets" anywhere in the world – is now operational on long-range bombers, strategic submarines, and presumably intercontinental ballistic missiles.

Fifteen years after the end of the Cold War, the United States continues to spend billions of dollars annually to maintain and upgrade its nuclear forces. It is deploying a larger and more accurate preemptive nuclear strike capability in the Asia-Pacific region, and shifting its doctrine toward targeting US strategic nuclear forces against "weapons of mass destruction" complexes and command centers.

As of January 2006, the US stockpile contains almost 10,000 nuclear warheads. This includes 5,735 active or operational warheads: 5,235 strategic and 500 nonstrategic warheads. Approximately 4,225 additional warheads are held in the reserve or inactive stockpiles, some of which will be dismantled. Under plans announced by the Energy Department in June 2004 (and possibly revised in spring 2005), some 4,365 warheads are scheduled to be retired for dismantlement by 2012. This would leave approximately 5,945 warheads in the operational and reserve stockpiles in 2012, including the 1,700-2,200 "operationally deployed" strategic warheads specified in the 2002 Moscow Treaty or Strategic Offensive Reductions Treaty (SORT).

To understand the composition of the US stockpile, it is helpful to examine the terms used to describe the different categories of warheads. Active warheads are maintained in a ready-for-use status, with tritium and other limited life components installed, and may be either deployed or stored. The active warhead inventory is broken down into deployed warheads, responsive force warheads, and spares. Deployed warheads consist of operationally deployed warheads (for example warheads on fielded strategic forces), warheads associated with weapon systems in overhaul and fielded nonstrategic weapons. Responsive force warheads consist of active warheads not on deployed sys-

tems. These are kept in secure storage but are available to be returned to the operationally deployed force. Depending on the particular weapon system, this task may take days, weeks, or months. Spare warheads are part of the active but not operational inventory, and support routine maintenance and operations. Inactive warheads do not have limited life components installed or maintained, and may not have the latest warhead modifications.

### New war plans

The Defense Department is upgrading its nuclear strike plans to reflect new presidential guidance and a transition in war planning from the top-heavy Single Integrated Operational Plan of the Cold War to a family of smaller and more flexible strike plans designed to defeat today's adversaries. The new central strategic war plan is known as OPLAN (Operations Plan) 8044. Former chairman of the Joint Chiefs of Staff Gen. Richard B. Meyers described some of the planning changes in April 2005 Senate testimony: "[US Strategic Command] has revised our strategic deterrence and response plan that became effective in the fall of 2004. This revised, detailed plan provides more flexible options to assure allies, and dissuade, deter, and if necessary, defeat adversaries in a wider range of contingencies."

One member of the new family is CONPLAN 8022, a concept plan for the quick use of nuclear, conventional, or information warfare capabilities to destroy – preemptively, if necessary – "time-urgent targets" anywhere in the world. Defense Secretary Donald Rumsfeld issued an Alert Order in early 2004 that directed the military to put CONPLAN 8022 into effect. As a result, the Bush administration's preemption policy is now operational on long-range bombers, strategic submarines on deterrent patrol, and presumably intercontinental ballistic missiles (ICBMs).

### **ICBMs**

In 2005, the Pentagon completed the retirement of the MX Peacekeeper ICBM, after almost 20 years of service. The missile's long and controversial history stretches back to the 1970s, when officials proposed many elaborate basing schemes to try and prevent a supposed "window of vulnerability" from increasing numbers of accurate Soviet ICBMs. By 1979 the program called for the deployment of 200 missiles, hidden among 4,600 shelters (one missile in each cluster of 23 shelters), in a kind of mobile shellgame spread over approximately 40,000 square miles of Utah and Nevada. In 1983, President Ronald Reagan canceled that basing scheme and cut the number of missiles to 100, to be placed in Minuteman missile silos, tacitly conceding that the vulnerability problem could not be solved or never existed in the first place. Two years later, Congress limited deployment to 50 missiles. The first 10 missiles, located at Warren Air Force Base (AFB), Wyoming, were declared operational on December 22, 1986, with the full force of 50 on alert two years later. The Pentagon phased out the MX over a three-year period beginning in October 2002; it deactivated the last missile on September 19, 2005. In the end, billions of dollars were expended to rectify an imaginary strategic vulnerability.

The 2001 Nuclear Posture Review (NPR) calls for MX silos to be retained, rather than destroyed as was required in the now-abandoned Strategic Arms Reduction Treaty (START) II. The United States will keep MX missiles for possible use as space-launch vehicles, as target vehicles, or for redeployment. The missiles' 550 W87 warheads will be temporarily stored, and a portion will eventually replace W62 warheads on Minuteman III ICBMs under the Safety Enhanced Reentry Vehicle (SERV) program beginning this year. All W62s are scheduled to be retired in 2009. A Minuteman missile can carry one or two SERVs with W87 warheads, but apparently not three. In total, we estimate that 200 W87 warheads will be used to complement the W78 warheads assigned to Minuteman IIIs, with the balance placed in the responsive force of reserve warheads. Full operational capability of the SERV is scheduled for autumn 2010.

The 500-strong Minuteman III force remains basically unchanged from last year, except for the elimination of 50 MM III. Under START I, the Air Force downloaded the 150 missiles located at Warren AFB to single-warhead configuration in 2001. With START II's ban on multiple independently targetable reentry vehicles (MIRVs) now a dead letter, US officials' revised earlier plans to download all Minuteman missiles to a single-warhead configuration. Although the Air Force plans to reduce the operational warhead loading on Minuteman IIIs to 500, it is considering keeping as many as 800 warheads for the Minuteman force.

Minuteman modernization continues under an ambitious \$7 billion-\$8 billion, six-part program intended to improve the missile's accuracy and reliability and extend its service life beyond 2020. The United States test-launched four Minuteman IIIs from Vandenberg AFB, California, between July 14 and September 14, 2005. Three tests flew a single unarmed reentry vehicle, while the fourth missile carried two vehicles. An August 25 test used a Minuteman III from the 564th Missile Squadron at Malmstrom AFB, Montana, with a single vehicle. The Air Force stated that the test aimed to "demonstrate the ability to integrate a safety enhanced reentry vehicle" for W87 warheads onto the Minuteman III weapons system. Military officials executed the September 14 launch through the 20th Air Force's airborne launch control system using a US Navy E-6B Mercury (TACAMO) aircraft.

The Air Force issued a Mission Need Statement in 2002 for a new ICBM to be introduced in 2018. The Air Force has earmarked more than \$10 million for 2006-2007 for studies to define the required capabilities and set milestones for missile development. Some defense strategists have suggested equipping a portion of the ICBM force with conventional warheads. There are rumors that the forthcoming Quadrennial Defense Review may recommend converting 50 of the 500 Minuteman missiles to conventional missions.

### **Submarines**

The Navy decommissioned the Trident I C4 missile, after 26 years of service, in late October 2005, when the Alabama off-loaded the last 24 operational C4 missiles. The entire

force of submarine-launched ballistic missiles (SLBMs) is now comprised of Trident II D5 missiles. When missile conversion is completed in 2008, the United States will have 336 Trident II D5 SLBMs on 14 nuclear-powered ballistic missile submarines (SSBNs), which is the force level decided on in the 1994 NPR; the missiles will be armed with approximately 2,000 warheads. The Navy has extended the service life of the subs from 30 to 44 years. The oldest sub is scheduled to retire in 2029, when a new SSBN class will be introduced. The C-4 missiles are stored under contract at Camp Navajo, Arizona along with retired Minuteman II missiles.

The Navy completed the first phase of downloading the warheads from all Trident II missiles in 2005 to keep pace with SORT goals. The Navy has opted for a gradual decrease in the number of warheads on its SLBMs over several years, rather than a sudden drop just before the end of 2012, the treaty deadline. Under START, each Trident II D5 missile is counted as carrying eight warheads, though the actual number varies depending upon mission. We estimate that each missile now carries an average of six warheads. They will be further downloaded as 2012 approaches.

During the past few years, the Navy has significantly changed the home porting of SSBNs to meet new planning requirements. It transferred two SSBNs from the Atlantic to the Pacific Ocean in 2002 and another in 2003. On August 17, 2005, the Louisiana left Naval Submarine Base Kings Bay, Georgia, on patrol. Rather than roaming the Atlantic during its 58-day patrol, the sub sailed around Cape Horn and ended up at its new homeport, Naval Submarine Base Bangor, Washington. On September 27, 2005, the Maine left Kings Bay on a similar journey, bringing to nine the number of SSBNs in the Pacific. Five subs remain in the Atlantic.

The primary goal of the shift is to increase coverage of targets in China, according to Navy officials. (Pacific-based SSBNs also target Russia and North Korea.) The buildup of the more capable Trident II D5s in the Pacific additionally "enhances system accuracy, payload, and hard-target capability, thus improving [US] available responses to existing and emerging Pacific theater threats," Rear Adm. Charles B. Young, director of the Navy's Strategic Systems Program, said in an August 2002 speech at the Strategic Weapons Facility Pacific.

The four oldest Ohio-class SSBNs have been removed from the nuclear mission and are being converted into cruise missile submarines (SSGN) at a cost of \$4.1 billion. Electric Boat Corporation, a division of General Dynamics, is the main contractor and built the original submarines. Work on the Ohio and Michigan is being done at Puget Sound Naval Shipyard, Washington, after which the subs will be home ported at Bangor. Work on the Florida and Georgia is being done at Norfolk Naval Shipyard, Virginia, after which they will be home ported at Kings Bay. We estimate that the Defense Department transferred the nearly 1,000 W76 warheads from these four older SSBNs to inactive/responsive status and will eventually send them to the Pantex Plant in Texas for dismantlement. (Yeah right, they won't have TLAM-N.)

## China Lake – Chapter 2

At least four important upgrades are under way involving the Trident II D5. The first is a life-extension program (LEP) for the W76 warhead that will significantly enhance the weapon's capability. Outfitting the W76/Mk-4 reentry vehicle with a new arming and fuzing subsystem (MC4700) will give the 100-kiloton W76 a ground-burst capability for the first time and will increase the types of targets that it can destroy. The modified W76 warhead, which may have its yield reduced by about 40 percent to 60 kilotons, according to a July report in Santa Fe's New Mexican newspaper, is designated the W76 Mod 1 (or W76-1), and the reentry vehicle is known as Mk-4A.

The Navy is working on a second warhead upgrade to equip the reentry vehicles with Global Positioning Satellite (GPS) receivers for increased accuracy. In 2004, Congress refused to fund the Enhanced Effectiveness (E2) Reentry Body program, which would have provided this capability, because of a concern that equipping SLBM reentry vehicles with GPS accuracy could lead to mini-nukes on the submarines.

Using other funds, the Navy supports programs to improve the missile's accuracy. One program aims to equip reentry vehicles with a three-axis flap system that steers the reentry vehicle during its descent toward its target, essentially creating a maneuverable reentry vehicle. In March 2005, the Tennessee launched a Trident II D5 missile equipped with an unarmed reentry vehicle fitted with the three-axis flap system and GPS. One Navy admiral who participated in the test told us: "I had GPS signal all the way down and could steer it." The test was also significant because the D5's 2,200-kilometer (1,367-mile) trajectory was the shortest ever flown by a US SLBM, according to the admiral, with the warhead impacting just 12-13 minutes after launch.

The third modernization program involves upgrading the current Mk-6 guidance system and extending its service life. The Mk-6LE (life extension) is scheduled to be operational in 2013 and would last through 2042. The fourth upgrade involves refurbishing the solid propulsion motors of the Trident II D5. Defense awarded a \$71.5 million contract to Alliant Techsystems for production of new solid propulsion systems for all three stages of the D5 through 2007.

The Navy continues to buy Trident II D5 missiles. It has bought 408 so far and requested an additional five missiles in 2005. Officials extended D5 production through 2013 and increased the total number to be procured from 453 to 561, at an additional cost of \$12.2 billion. The total cost of the program is now \$37 billion, or \$66 million per missile. To make the D5 operational through 2042 (to the end of the extended service life of the Ohio-class SSBN), the Navy will upgrade existing missiles to a new variant, the D5LE. In 2003, Congress budgeted \$416 million to modernize the D5. At any given time, 336 Trident II D5s will arm the 14 US SSBNs (including two sets for two SSBNs that will be in overhaul), 58 D5s will be allocated to Britain for their SSBNs, and the balance will be available for flight tests. The Navy appears to have dropped plans to equip its new submarine-launched intermediate-range ballistic missile (SLIRBM) with dual nuclear-conventional capability in favor of developing only conventional warheads for the weapon. Defense awarded a \$9.2 million, 16-month contract to Lockheed Martin in July 2005 to demonstrate and validate solid rocket motor technologies for a two-stage SLIRBM design. The program envisions fitting multiple SLIRBMs inside each missile tube on SSGNs, adding a second conventional strike weapon to the boats' Tomahawk sea-launched cruise missiles. The SLIRBM is intended to precisely deliver a conventional payload at ranges in excess of 1,770 kilometers (1,099 miles) within 10-15 minutes of launch.

After a more than 11-year hiatus, the Navy has resumed SLBM flight-testing in the Pacific. In November 2004, the Nevada launched two Trident II D5s down the Pacific Missile Range. In March 2005, the Tennessee test-fired a missile in the Atlantic, and in October the Royal Navy's Vanguard test-fired a D5 missile, also in the Atlantic. In anticipation of flight-testing in both oceans, the Navy, with the help of the Johns Hopkins Applied Physics Laboratory, converted two 8-foot by 40-foot containers into vans for data processing and analysis during test-launches.

# Bombers and bomber weapons

The United States has two types of long-range bombers for nuclear missions: the B-2 Spirit and the B-52H Stratofortress. The B-52Hs are based at Barksdale AFB, Louisiana, and at Minot AFB, North Dakota; the B-2As are based at Whiteman AFB, Missouri.

The B-52s can deliver cruise missiles, gravity bombs, or a combination of both; B-2s carry only bombs. Both have conventional missions as well.

Neither bomber is maintained on day-to-day alert as during the Cold War, yet the alert level has increased with the recent tasking of bomber wings in Global Strike missions. In October 2004, for example, the Air Force launched 13 B-52s near-simultaneously from Barksdale AFB in a minimum–interval takeoff, with each bomber taking off within a minute or less of one another. The commander of the 8th Air Force at Barksdale AFB told the Times of Shreveport in October 2005 that the 8th Air Force is now "essentially on alert... to plan and execute global strikes" on behalf of Strategic Command.

A five-year modernization effort completed in 2003 enables the B-2 to carry a mix of B61 and B83 nuclear bombs as well as various conventional weapons. B-2s are already capable of making some targeting changes en route, but the Air Force is replacing the onboard UHF and VHF radios, and satellite communications systems, with a new system that will allow crews to receive beyond-line-of-sight (BLOS) voice and data communications, and review full mission plans en route to their targets. An extremely high frequency (EHF) satellite communication will be added to ensure the bombers have secure BLOS communications in their nuclear mission. The Air Force is also equipping all B-2s with a new external coating known as alternate high-frequency material, which will increase the bomber's stealthiness and ease its maintenance. The program will be completed by 2011.

The Air Force began installing the Avionics Midlife Improvement (AMI) on the B-52H in 2005, to improve the aircraft's navigation and nuclear weapons delivery. Installation on all bombers will be completed by September 2008. Technicians will also replace the bomber's existing satellite communication system with an EHF radio to improve connectivity in nuclear-strike scenarios.

The weapons deployed on US strategic bombers have a variety of capabilities. B61-7 bombs have multiple yield options, sometimes referred to as "dial-a-yield," ranging from 10 to 350 kilotons. The bomb, which is almost 12 feet long and weighs approximately 760 pounds, has five fuzing options: free-fall airburst, parachute-retarded airburst, free-fall contact burst, parachute-retarded contact burst, and parachute-retarded lay down delayed-surface burst (with 31-second and 81-second delays available). The B61-11 "bunker buster" is a B61-7 with a one-piece hardened-steel center case and a new nosepiece and rear subassembly, which provide for ground penetration and add approximately 450 pounds of weight. The 400-kiloton weapon is also equipped with a special ground-impact time-delay feature to allow it to penetrate 3-6 meters (10-20 feet) underground before detonation. The Pentagon and Los Alamos National Laboratory developed the Mod 11 to replace the 9-megaton B53 bomb, whose purpose was to hold selected deeply buried targets at risk.

The B83 is a high-yield strategic bomb with variable yield options up to 1.2 megatons. It is designed for high-speed external carriage and low-altitude delivery against hard targets. The weapon is built for relatively hard impacts on irregular, reinforced concrete surfaces, such as ICBM silos. The bomb weighs 2,400 pounds and has four sections behind its hollow shock-absorbing nose. The first compartment houses the warhead; the mid-case contains the firing set and fuzing controls; the aft-case contains the arming system and thermal batteries; and the last compartment holds the parachute system, which contains a 46-foot Kevlar-nylon ribbon parachute that is held by 60 Kevlar suspension lines and deployed by three 4-foot diameter pilot chutes. The 180-pound parachute system can reduce the bomb's velocity from about 700 miles per hour to 44 miles per hour within a few seconds.

The advanced cruise missile (ACM) and air-launched cruise missile (ALCM) carried on the B-52H are undergoing service life-extension programs to prolong their lifetimes through 2030. The ACM's forward-swept wings and tailplanes, flush air-intake, and flat, shielded jet exhaust make it difficult for radar to observe the missile. The ACM has a range of 3,000 kilometers (1,864 miles) and for guidance uses an inertial navigation system, together with a terrain contour matching (TERCOM) system to provide accuracies of 100-300 feet circular error probable. TERCOM uses a downward-pointing radar altimeter to determine the missile's altitude as it flies toward a target and compares the ground elevation profiles with maps stored in memory to determine if it is on course. The ALCM has the same navigation and guidance system but has a slightly shorter range of approximately 2,400 kilometers (1,491 miles). Both missiles are equipped with a W80-1 warhead, which has variable yield options up to 150 kilotons. The Air Force moved all remaining reserve ALCMs at Fairchild AFB, Washington, to Barksdale AFB in November 2005.

The Air Force is studying options for a next-generation nuclear cruise missile. One possibility is a joint enhanced cruise missile with a nuclear payload and longer range to support Global Strike missions against "targets deep within future high-threat antiaccess environments," according to Air Force documents. The new missile could be delivered by bombers or from various ground or sea platforms.

# **Nuclear Surety Inspections**

Air Combat Command's inspector general periodically conducts Nuclear Surety Inspections (NSI) to assess if rules, regulations, and procedures are being maintained to the highest standards. The inspections evaluate many areas, including weapon loading and mating procedures; storage, maintenance, and security practices; accident ("Broken Arrow") response; exercises to recapture and recover a nuclear weapon; processing and relaying emergency action messages; and permissive action link/use control operations that ensure that authorization orders are authentic.

Inspectors conducted an NSI of the 5th Bomb Wing at Minot AFB from December 12 to 19, 2004 and rated the base satisfactory. An NSI conducted from July 9 to 16, 2005 of the 2nd Bomb Wing at Barksdale AFB was rated unsatisfactory. Inspectors visited Whiteman AFB in December 2003 for an NSI, and a follow-up was expected in mid-2005. From February 18 to 24, 2004, inspectors conducted an NSI of the 896th Munitions Squadron (MUNS) at Nellis AFB, Nevada. The 896th MUNS receives, ships, stores, and maintains a huge stockpile of nuclear weapons. The Weapon Storage Area consists of 790 acres, crisscrossed by 36 miles of roadway, and houses 75 specialized storage igloos. The inspectors graded 18 areas, and the MUNS received 17 excellent or satisfactory ratings and one outstanding.

### Nonstrategic nuclear weapons

The United States retains approximately 500 nonstrategic operational nuclear weapons and keeps another 790 in reserve. These include the B61-3,-4, and-10 gravity bombs and the W80-0 warhead for the nuclear Tomahawk land-attack cruise missile (TLAM-N). The B61-10 is no longer in the active stockpile, according to Energy documents. The 2001 NPR did not address nonstrategic nuclear weapons.

The United States deploys B61 nonstrategic nuclear bombs at eight bases in six European countries for delivery by various US and NATO aircraft. Additional tactical bombs are in reserve status stored at Kirtland AFB, New Mexico, and Nellis AFB. The Air Force deploys approximately 50 bombs with the 4th Fighter Wing at Seymour Johnson AFB, North Carolina. The 27th Fighter Wing at Cannon AFB, New Mexico, no longer has a nuclear mission, and the base is expected to be phased out under the 2005 Base Realignment and Closure process. US delivery aircraft include the F-16C/D Fighting Falcon and F-15E Strike Eagle. NATO aircraft assigned nuclear missions include US-supplied F-16s and German and Italian Tornado bombers. Under current Air Force planning, a portion of the F-35 Joint Strike Fighter (JSF) force will have nuclear capability starting in 2012. The JSF program completed an initial nuclear certification requirements plan in 2004, and more detailed procedures to make it nuclear capable began in 2005.

Selected Los Angeles-class, improved Los Angeles-class, and some Virginia-class attack submarines can deploy with TLAM-Ns. The Navy plans to refurbish the missiles, and Energy their W80-0 warheads, to extend their service life to around 2040. An estimated 320 TLAM-Ns are currently stored at the Strategic Weapons Facilities at Bangor, Washington, and King's Bay, Georgia, alongside strategic weapons for the SSBNs.

While most US nuclear-powered attack submarines (SSNs) were credited with some nuclear capability during the Cold War, today most SSNs do not have nuclear missions. In the Pacific Fleet, for example, less than half of the attack submarines regularly undergo nuclear certification. But if the order were given, Tomahawks could be redeployed in 30 days. We estimate that no more than 12 out of around 50 SSNs have nuclear capability. The Navy has test-launched unarmed Tomahawks 92 times since 1978. Two of these were conducted in 2005, one from the Greenville and another from the Minneapolis-St. Paul.

### **Nuclear warheads**

To ensure the reliability of nuclear weapons beyond their original design lives, most of the warheads in the "enduring" stockpile are scheduled to undergo life-extension programs over the next decade. The first of these programs began in 1999 and was for the W87; it was completed in 2001.

The B61-7/-11, W76, W78, W80, B83, and W88 warheads will also undergo lifeextension programs. Some life-extension programs are substantial enough to change a warhead's modification designation. Accordingly, the W76 will become the W76-1, and the W80-0 and W80-1 will become the W80-2 and W80-3, respectively. The first production units of the W80-2 and B61-7/-11 are scheduled for delivery later this year, the W76-1 in 2007-2008, and the W80-3 around 2008. The B61-7/-11 LEP involves refurbishing the secondary.

Strong congressional opposition to the Robust Nuclear Earth Penetrator (RNEP) warhead program induced Energy to withdraw its 2006 funding request for the program, but hardened-case penetration tests applicable to RNEP will likely continue with Defense funding at Sandia National Laboratories.

After spending almost \$2 billion during more than a decade, Energy is still "reestablishing" small-scale plutonium pit production at Los Alamos. Lab scientists produced two certifiable W88 pits in 2003, four more in 2004, and six in 2005. Energy plans to test these pits in support of achieving W88 pit certification (for quantity production and

stockpiling in the "war reserve") in 2007. Los Alamos aims to manufacture 10 W88 pits per year from 2008 to 2014. As part of its "pit campaign," Energy also hopes to "establish manufacturing process capability for all pit types" by 2009 and to "manufacture initial pit EDUs [engineering demonstration units] for Reliable Replacement [Warhead] pits" by 2012, according to its 2006 budget request.

In total, Los Alamos could be making plutonium pits for as many as 30-40 new warheads per year after 2010, according to an October 2005 Albuquerque Journal interview with Linton Brooks, the administrator of the National Nuclear Security Administration. Energy's plans for constructing a larger Modern Pit Facility at a new site are on hold.

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Sharon and I were ready. I'll change voice now and keep you up to date in first person and present tense. This is Tired Old Man after we got all we could take of the kid living with us; we sold the house and moved to China Lake aka Ridgecrest. We gave her the unlisted phone number, but she couldn't use it to trace our address. We told Lorrie that she could get David's kid to drive her to Baby Steps; it was too far to come to Palmdale. We'd had enough – let me tell you!

Want to know how we spent Christmas Day, 2005? Sharon's sister Charlene was sick and on the 24th, Sharon went to California City and offered to take her to the doctor. She wouldn't go! On Christmas Day morning Sharon talked to her and she was ok. But, an hour later, Sister Shirley called to say that Charlene had fallen down and was on the floor and couldn't get up. The ham didn't get cooked. Sharon and Amy went to California City and then spent the day in Tehachapi at the hospital while they decided what to do with Charlene. I baby-sat all day. Merry Christmas! We put the house on the market on January 3rd.

So here we are in March 2006 in China Lake, watching the news and worrying. I turn 63 on Thursday, March 23rd. Sharon turned 59 on February 12th. The new house had a wheelchair ramp and I could finally take Missy for her walks. We were down to Missy, Shadow, Pyewacket, Sassy, Taffy and HB. I don't mind the cats because they know where to poop. Besides, my office was in the basement now and the litter pans were up stairs. I'd have bought a SOCOM II, the SOCOM 16 or a M1A Scout Squad rifle but the Loaded M1A model was cheaper. I bought CA legal and replaced the compensator with a bayonet lugged flashhider and got myself a bayonet.

I didn't trust Derek's judgment since he'd volunteered to go to Iraq. Must have po'd him; he'd stopped writing emails, forcing me to check the casualty lists daily. When he'd gone to Kosovo, he'd done the same thing, got depressed and stopped writing. I'd be depressed too if I wasn't just naturally depressed already. My M1A has the black fiberglass stock because it's cheaper than walnut and has a recoil pad.

Yes, I sighted it in. I could hit a man-sized silhouette at 100-yards, nine ring or betgter. I was waiting for the next check from the trust fund to buy more of the Aussie surplus and

maybe a real pistol for Sharon. Something like a good used M1911 and she could take half of the magazines I'd gotten from Ammoman, via Arkansas. I'd gotten 2 of the flash-hiders with the bayonet lugs and 2 bayonets with sheaths because I was planning on buying Sharon her own M1A. She'd have to carry the M1911 with a round in the chamber because she couldn't work the slide.

Sandy sold me the rifle for \$1,300 plus tax. She also sold me a used M1911. Now we both had one of each, or I had 2, it was a matter of perspective. We went to the range a second time and Sharon sighted the M1A in. She claimed that we'd have to be up in our behinds in alligators before she'd carry the M1911 or the M1A. I told her that I could respect that as long as she didn't get the alligators and crocodiles mixed up. Now the AL-ICE rigs were identical and I could carry my James Bond gun as a backup. I was expecting the crap to hit the fan just any day now, as I had been since 9/11/01. And there was just enough money left over to go to back to Sandy's and buy a pair of 590A1s.

Here we sat, all dressed up and it wasn't even Halloween. We might have made a good April Fool's joke, but Halloween would have to wait. As a young girl, Sharon's dad had taken her hunting and she could shoot a shotgun. I gave her one of the Mossberg's. I gave her the  $2\frac{3}{4}$ " 9 pellet 00 buck and bought a case of 3" 15 pellet 00 for me. They were interchangeable but the Express Magnum shells had a kick. She got the classic  $2\frac{3}{4}$ " Brenneke slugs and I got the 3" black Magic slugs.

She went back to her quilting and I returned to my computer to write story number 60 something. Patti had gotten me a DVD player for Christmas and Amy had gotten me Star Wars 1 through 6.

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Did you ever throw a party and nobody came? That's what it felt like, scurrying to get ready for the end of the world and then having nothing happen. About the only thing that changed was that they had more earthquakes in Ridgecrest than in Palmdale. In case you don't know where Ridgecrest is, it's on the other side of the mountains from Death Valley and 150 miles down the road (395) from the Long Valley caldera. I searched the web for faults in the Ridgecrest, CA area.

"With all of the activity going on at the northern edge of the Mojave Desert Block I decided to do an in depth analysis this evening. By going over the list of micro quakes I observed certain new patterns in development. Possibly the Trona Quake swarm is headed towards the Southern Death Valley fault zone as the stress jumps over the Panamint Valley fault. It's now over one week since the beginning of the doubling of the MT reading from near 6 to 7 units and it's currently averaging better than 12 units of regional tectonic stress. We now need to watch the faults, which span from near Ludlow and Barstow towards the northern edge of the Mojave Desert Block near Ridgecrest, CA. This is most likely the weakest point along the next segment to break in that region. The Garlock FZ is now under extreme pressure from the ECSZ fault complexity in the region that is pushing it to the north and we need to consider that either Coso Volcanic Center, Walker Pass, Lake Isabela or Bishop/Mammoth Lakes may begin to act up in the near future as a result of this Trona swarm and stress transfer from the Mojave Desert Block to the Inyo-Mono and Sierra Nevada blocks. Also, the Delta-Index is now at an all-time low reading of 5.01nT. This indicates that the local geomagnetic field is highly suppressed in this area close to the Cajon Pass and the San Andreas, Northern Frontal and Helendale faults. My guess here is that since the -60nT shift there was a significant thermal change at depth, which caused the magnetic properties of the rock structure at depth below the lab (1 to 2 miles) to change with the Curie (Temperature) Point. So is this another good indication that the Pacific plate boundary at the big bend is surely but slowly subducting beneath the North American Plate from Gorman to Morongo Valley? It appears that it's doing just this. The other areas with ULF activity included the San Jacinto/Elsinore fault from Hemet to Borrego Springs and Julian, CA."

Ridgecrest is located in the southern portion of the Indian Wells Valley, surrounded by four mountain ranges: the Sierra Nevada on the west, the Cosos on the north, the Argus Range on the east, and the El Paso Mountains on the south. It is approximately 80 miles from the Lancaster/Palmdale area and approximately 125 miles from both Bakers-field and San Bernardino, the three nearest major urban centers. As the only incorporated community in the Indian Wells Valley, Ridgecrest acts as the urban center for northeastern Kern, Inyo and San Bernardino Counties. The City's incorporated area includes approximately 13,300 acres. Ridgecrest is host to the famed federal research and development laboratory at China Lake. Ridgecrest is located in the Mojave Desert east of the Sierra Nevada Mountains and west of Death Valley National Park.

Ridgecrest has 28,978 people and is located 2,289 feet above sea level. The meteorology in the Indian Wells Valley is predominantly influenced by its high desert location. The climate is characterized by hot days and cool nights, with extreme arid conditions prevailing throughout the summer months. The mean annual temperature for the Ridgecrest area is 65° F. There are wide annual temperature fluctuations that occur from a maximum of 118° F to a minimum of 0° F.

Ridgecrest, incorporated in 1963, is located in the northeast corner of Kern County in the Northern Mojave Desert. Prior to the establishment of the Naval Ordnance Test Station (NOTS) at Inyokern in 1941, Ridgecrest, then "Crumville," consisted of a few scattered farms and homesteads. Ridgecrest evolved during the 1950's and 1960's as a support community, vital to the mission of NOTS, by providing housing and services for Federal employees and contractors.

NOTS, later China Lake Naval Weapons Center (NWC) and now the China Lake Naval Air Weapons Station (NAWS) home to the Naval Air Warfare Center (NAWC) Weapons Division, continues to be the major source of employment for Ridgecrest residents. At the same time, NAWS depends increasingly upon Ridgecrest for support services. The

economic stability Ridgecrest has enjoyed as a service community for the NAWS has been essential to its successful emergence as a community in its own right.

Now you know as much about Ridgecrest as I do. What's the difference living in Ridgecrest? I didn't drive and would probably never get out of the house except once every 3 months to go to Northridge to see Dr. J, or daily to wheelchair Missy. It doesn't matter if you got to the doctor monthly or quarterly, it costs about the same and nothing ever changes, except if you only go quarterly, you get a blood draw every time. I tried switching doctors once, what a disaster. It was easier to drive the 140 miles to Northridge than to reeducate a doctor.

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My take on the situation was that if the left one don't get you, the right one will. You get older and you can't remember what you had for breakfast or even if you ate breakfast. But, you can remember the craziest things from when you were growing up. Much to my chagrin, not all of them were worth remembering. Clearly, I was expecting WW III. It will probably happen too, although maybe not in my lifetime. I'd taken a shot at every possible disaster that could befall a particular location somewhere around the US in my stories. I hadn't written much about tornados, except to relate the circumstances of the F5 that hit my hometown on May 15, 1968.

The entire west coast of the US is a mammoth earthquake zone that has a range of volcanic mountains and even its own Supervolcano. There is, according to geologists, more than one subduction zone although Cascadia is the most famous because it's offshore and produces a tsunami. What was it that guy claimed? "So is this another good indication that the Pacific plate boundary at the big bend is surely but slowly subducting beneath the North American Plate from Gorman to Morongo Valley?" No sweat, Morongo Valley is in the Inland Empire and Gorman is the same place it's always been, at the top of the Grapevine on I-5.

"Did you get the Aussie surplus you wanted?"

"It was all sold out. I had to get Lake City overruns of training ammo."

"Is that good or bad?"

"I think it is M80 ball, I'm not sure. The ad said NATO ball and the box says for training purposes only. The upside is it was manufactured in 2004. I bought 6 cases so we have enough for a couple of wars. You know, Sharon, I was perfectly happy with my Mini-14 with the Butler Creek folding stock and flashhider. Then Fleataxi told me it wasn't any good because the barrel heated. I may get a couple of those rifles and make up a couple of them since they weigh half what the M1A weighs."

"What's the recoil like?"

"What recoil? It's a 5.56×45mm cartridge."

"Can you get the magazines?"

"Sure, run me over to Lost Wages and we buy the stocks, flashhiders and PMI 30-round magazines."

"I wish you hadn't turned in your driver's license."

"Me too, but do you know how hard it would be to get it back? I could have wet noodles stuff up the behinds of 50 wildcats before that would happen. Besides, you know how I used to drive. There were 2 positions to the gas pedal, up and down. After driving a Buick Park Avenue, anything else would be a major let down unless we can afford a H1 Alpha Hummer. For that, I'd get my driver's license back."

"When do you want to leave?"

"Tomorrow morning, I figure out a route on MapBlast."

It turned out that the only good way to get to Vegas was to take 395 to 58 to I-15. I would have gone to Trona and cut across Death Valley, but Sharon would have had puppies. So off we went, the long way and we made it to Vegas (240 miles) in about 5 hours. It would have taken me about 3½ if I still drove. Guess what? A person may only buy a firearm within the person's own state, except that he or she may buy a rifle or shotgun, in person, at a licensee's premises in any state, provided the sale complies with state laws applicable in the state of sale and the state where the purchaser resides. [18 U. S. C 922(a)(3) and (5), 922(b)(3), 27 CFR 178.29] We bought the Mini-14s at one place and the folding stocks and magazines at another. We only had to show our driver's license/ID card to buy the rifles and Mini-14s were legal in California. The guy who sold the rifles didn't think much of California's waiting period, Thank God. Besides, he probably didn't think a couple of seniors would rob the Bank of America.

We wouldn't you know, Baretta said don't do the crime if you can't do the time and we were too old to do that. Streetwise, undercover, unconventional cop Baretta solves crimes, often using disguises, with the help of stoolie Rooster and pet cockatoo Fred. He should have taken his own advice. Blake was arrested for his wife's murder, but the presumption of innocence trumped what jurors believed to be flimsy evidence, and Blake was acquitted in a trial, which made worldwide headlines. Reportedly broke from legal costs, Blake indicated hopefulness that he might be allowed to return to acting work. He played Little Beaver in 22 movies, in case you're wondering, Tucson Raiders (1944) through Marshall of Cripple Creek (1947). Wild Bill Elliott played Red Ryder until Allan Hale took over in Santa Fe Uprising (1946). Then the Blakely family sued him and won more money than Blake would ever see the remainder of his life, \$30 million.

## China Lake – Chapter 3

Fred the bird appeared on the detective drama BARETTA/ABC/1975-78. In real life, Fred was actually called Lala (or Lalah). He got his name because he liked to repeat the phrase "La-la-la-la-la." Owned by animal trainer Ray Berwick, Lala was born in Hong Kong and found smuggled into America with a cage of chickens. He originally spoke only Chinese, but Berwick's bird was a quick study and soon learned English and a number of clever tricks like pedaling a bicycle, imitating the sound of a dog and cat, riding a scooter, running on a treadmill and saying "I love you."

For the series, Lala had a bird stunt double named Weird Harold used for flying sequences (Harold died from liver illness after the first season) and two other birds called Sweetheart. Lala won a PATSY award in 1976 and again in 1977 and Photoplay magazine awarded him with a Gold Medal for being their favorite animal star. As of the 1980s, Ray Berwick featured Lala in an animal show at the Universal Studio's Tour in southern California and at the San Diego Wild Animal Park. Producers for the program initially wanted to use a Raven or myna bird, but Lala's outgoing personality and large vocabulary got him the part. Now deceased, Lala lived to be about seventy years old.

Sharon seemed to like the folding stock Mini-14. It weighed less and for the same weight, she could carry more ammo. Unfortunately, we had to spend a night in Lost Wages so she could play the slot machines. I wish I could tell that she won a million bucks, but she didn't. She never played enough to get us comp'd for one free drink.

Why China Lake and not Ridgecrest? I like snappy titles and Ridgecrest is about as exciting as, well never mind...

Ridgecrest cooled off in December and January with daytime highs around 60 and nighttime lows around 30. July and August were just the opposite with daytime highs around 100 and nighttime lows around 70. There were quite a few of us seniors in the town, according to Sharon.

An Indian Wells California Historical Landmark was erected near the Indian Wells Lodge, 4.9 miles north of Freeman Junction on Highway 14 where William L. Manly found water after his group left Death Valley. The inscription on the plaque reads: After five days' travel from the Argus Range, the Manly-Jayhawker parties of 1849 found their first water at this Indian waterhole on the Joseph R. Walker Trail of 1843. During the 1860s, this was the site of a stage and freight station for traffic between Los Angeles and the Coso and Cerro Gordo Mines. There is also a community by that name near Palm Springs.

Mojave Red is a smooth rich red lager without the bite. This High Desert's Favorite Microbrewed beer is taking California by storm. This 3-time gold medal winner is a combination of 5 different styles of malts with a several different Yakima Valley hops for a smooth red lager unlike any other that you've ever had. Mojave Red is currently only available throughout the Indian Wells Brewing Co.'s distributing area and all west coast Trader Joe's stores. And to think I have 7 years sober and would never find out. Maybe I should buy Sharon a six-pack and when she isn't looking... She counts her beers so that won't work, darn it. There's a downside to being a recovering alcoholic, they keep bringing out new things and you don't get to try them. This Christmas, they advertised Bombay Sapphire Gin and I thought I was going to go nuts. No, the booze isn't blue, that's the bottle. Its gin, but man, is it smooth.

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Did you ever throw a party and nobody came? That's what it felt like, scurrying to get ready for the end of the world and then having nothing happen. Oh, I asked already. I picked up a couple of those adapters to use stripper clips to load the PMI magazines. Ammoman had the .223 in stripper clips, in bandoleers (1,680 rounds per crate) or 3 10-round clips to the box (1,800 rounds per case). I ordered one crate of the ammo in bandoleers and 2 cases of the ammo in the boxes. I figured we could recycle the bandoleers. Over 5,000 rounds divided between 2 Mini-14s.

We were ready for WW III but that's not what happened. It seems the Chinese were just out sailing around and the US government overreacted, or something. Mt. St. Helens burped, but that wasn't any kind of a big deal. We made it to the first of July 2006 before The Stuff Hit the Fan. If it hadn't, this would be even more boring than it already is. Did you ever wonder why Ridgecrest had so many earthquakes? Yellowstone has a lot of earthquakes because it has a magma chamber. Long Valley has earthquakes because it has that old caldera.

Analysis of seismograms from teleseismic rays traversing the Coso geothermal area near Ridgecrest, California, suggests the geothermal system lies over a single shallow magma reservoir (~5 km below the surface) that also plays a crucial role in the local change in deformation style from areas to the north and west. The character of the magma reservoir and the absence of a lower crustal magma reservoir is inferred from three crustal P-to-S conversions observed using receiver function analysis: (1) A high-amplitude, shallow, negative arrival, Ps-P time of 0.7–0.9 s (3–5 km below sea level (bsl)), (2) a moderate amplitude, positive conversion, Ps-P time of 2.1–2.5 s (14–17 km bsl), and (3) the Moho conversion, Ps-P time of 4.0–4.2 s (30–32 km bsl).

Observations of Moho converted arrivals indicate that the interface is mostly flat and uncomplicated throughout the study area, while the midcrustal conversion is laterally variable in amplitude and depth. The absence of the large negative amplitude conversion on waveforms recorded at stations outside the geothermal area strongly suggests that the feature lies only underneath the modern geothermal area. In addition, rays sampling the shallow converter also contain later arrivals with retrograde moveout consistent with an origin as reverberations above the conversion. Receiver functions calculated from synthetic data using a single isotropic layer over a half-space indicates that the shear velocity decreases by 30% across the interface (VS1 = 2.6 km/s; VS2 = 1.8 km/s; layer one thickness 4.9 km), further supporting the presence of shallow magma.

### Huh?

The Coso Volcanic Field is also well known as a geothermal area. Fumaroles are present along faults bounding the rhyolite-capped horst and locally within the rhyolite field. A multi-disciplinary program of geothermal assessment carried out in the 1970s defined a potential resource of 650 megawatts electric with a nominal life span of 30 years. Judged by the youthfulness of the rhyolite lavas and by a zone of low seismic velocity crust roughly beneath the rhyolite, a magma body may be the source of thermal energy for the geothermal system. Commercial development beginning in the 1980's resulted in the startup of a geothermal steam-driven 3-MW electric power plant in 1987.

The Coso Volcanic Field is one of the most seismically active regions in the United States, producing dozens of tremors in the M1 and M2 range each week. Tremors in the M3 range occur at a rate of 2-6 per month and M4 action happens couple-three times each year. The last M4 temblor occurred March 28, 2000 and measured M4.3. The most recent activity in the M5 range happened in 1996 and 1998 when tremors of M5.3 and M5.1, and M5.2 and M5.0, respectively, occurred with a day of each other. These tremors were actually recorded along the eastern side of the Coso Volcanic Field, some 15 miles from today's action.

Earthquake swarms are common in the Coso area, often producing hundreds of tremors over short periods of time, like a few days. This kind of brisk and robust seismically is common in volcanic areas, such as Long Valley Caldera located near Mammoth Lakes, and Yellowstone Caldera at Yellowstone. The Coso Volcanic Field shows stunning examples of volcanic activity, probably last active 30-40,000 years ago, but ash emission and small cone building episodes may be Holocene (>10,000 years) in age.

The Coso Range of eastern California is located just south of Owens Lake (dry), east of the Sierra Nevada Mountains, and west of the Argus Range. The southern part of the range lies in the restricted China Lake Naval Weapons Center. The mountains include Coso Peak, at 8,160 feet above sea level, as well as Silver Peak and Silver Mountain, both more than 7,400 feet in height.

The range is underlain principally by Mesozoic granitic rocks that are partly veneered by upper Cenozoic volcanic rocks. The volcanic units (in apparent decreasing age) include (1) widespread basaltic flows, (2) dacitic flows and tuff, and (3) rhyolitic domes and flows and basaltic cones and flows. These volcanic rocks are encompassed by an oval-shaped zone of late Cenozoic ring faulting that measures about 40 km east to west and 45 km north to south and that defines a structural basin. Most of the Coso Range and a slice of the adjacent Sierra Nevada lie within this ring structure. The youngest volcanic rocks are Pleistocene and, with associated active fumaroles, occupy a north-trending structural and topographic ridge about 18 km by 10 km near the center of the basin. The ring structure and associated volcanic rocks suggest a large underlying magma that has periodically erupted lava to the surface during the past few million years.

Darned thing blew its top; nobody expected that. They had 16 sensors and nobody got any indication, not that they reported anyway. That's the problem with the geothermal plant being at China Lake. China Lake is a restricted Naval Weapons test facility. Everything that happens there is a secret. You realize that there's China Lake North and China Lake South. Look at the map for crying out loud. They don't even touch each other. South is adjacent to Ft. Irwin. North has the new volcano at the hot springs. They locked the base down tighter and we could see the darned cloud of ash rising halfway to the moon. You try and get them to let you go north on 395. Sorry, road closed!

M<sub>w</sub> 7.5 quake went along with the first little eruption. Rock and roll time. That turned out to be the precursor. Do you know that word, precursor? If you don't you're a new reader of my stories. Look it up. You know how I knew it was a precursor? About an hour later, we got a Big One, M8.6! And that little ash cloud became a much bigger ash cloud. If there were any pyroclastic flows, it was a government secret. Those reporters could yell freedom of the press all they wanted, but if they flew over China Lake NAWS without permission, they'd get shot down. They made a better target than a Firebee. The Firebee was the drone the Navy used when I was in the service. They also had NOLOs, (No Live Operator) which were F-4Ds from the Korean War and once they even used a Regulus II missile as a target. Tried to land it on San Nicolas land and crashed it.

It was fun being on the Pacific Missile Test Range during 1964. At the moment, it felt like they moved the PMTR to the middle of the state. You want ash? Come see me and bring your dump truck. I've got to be careful here or I'll let myself get off track and start telling war stories, again. We were only about 30 miles, maybe less, from America's newest volcano. I can't throw a rock 30', but that volcano could throw them all the way to Ridgecrest. Mt. St. Helen's should be ashamed of herself. Piker! The sky got dark and I was in the basement so I didn't notice. Sharon came downstairs and wanted to know what the darkness was about.

"Darned if I know, dear. Let me check the TV." (Ridgecrest had Mediacom cable TV and I had switched to a cable router.) "Say did either quake break anything?"

"Not that I know of. Why, can't you get the TV to work?"

"I'd better go make sure our generator has fuel in it and will start. Try a radio station."

When we moved to the new place in Ridgecrest, we anchored everything in the house. We had earthquake putty, anchor straps and all manner of tie downs. It only made sense because Ridgecrest had about 10 times as many larger shakers than Palmdale, or so it seemed. The second quake had rolled me around a bit, but I never even considered that it was a volcanic eruption. 9 times out of 10, I never even felt earthquakes when they happened. I couldn't ignore the M7.5 or the bigger M<sub>w</sub> 8.6. However, in self-defense, let me say that since nothing got broken, neither was worth getting excited over.

My Craftsman generator was electric start. I had a 10' cable from the panel that plugged into the 30amp outlet on the generator. I got the generator running and then shut it down. You really couldn't run too much on a 6.3kw generator. With the ash in the air, I was hoping I wouldn't have to run it; some particles could get through the air filter and ruin the engine. We were lucky, I guess, the utilities stayed on.

"I think I saw something like this on TV 25 years ago," Sharon pointed out.

"May of 1980 when Mt. St. Helens blew up."

"I can't believe there was a magma pool under this area."

"Surprised me too, Sharon. I thought there was a magma pool under Long Valley but this must have been another one."

"What's it all mean?"

"Maybe the lava got tired of being in the ground and wanted to see sunlight?"

"It's a disaster."

"A disaster is when there are billions in property damage and hundreds, thousands or millions of people get killed. This was more like an unexpected natural occurrence. I found out they knew about the magma pool and all of the faults in the area, but as nearly as I can tell, no one expected a volcano."

o

Rarely do volcanologists get to watch the birth, growth, and death of a volcano. Paricutin provided such an opportunity. The eruption that created Paricutin began in 1943 and continued to 1952. Most of the explosive activity was during the first year of the eruption when the cone grew to 1,100 feet (336 m). The cone continued to grow for another 8 years but added only another 290 feet (88 m). Effusive activity began on the second day and continued to the end of the eruption. Lava flows covered about 10 square miles (25 square km) and had a volume of about 0.3 cubic miles (1.4 cubic km). The rate of eruption declined steadily until the last 6 months of the eruption when violent explosions were frequent and violent. No one was killed by lava or ash. However, three people were killed by lightning associated with the eruption. This was the famous *volcano that started in a farmer's corn field*.

USGS called the new volcano Coso Peak, naming it after the Coso Volcanic Field.

o

I had a box of the blue paper air masks that one usually uses when painting. I didn't want Sharon driving and ruining the engine of the car. Maybe it was something Gunny

Highway said... Hey, I'm supposed to make this stuff up, not live it! Once the lava established a regular flow, we didn't have an ash cloud any longer. Hawaii had Kilauea and we had Coso Peak. Background volcanic tremor is about normal at Kilauea's summit. Volcanic tremor is at a moderate level at Pu`u `O`o and shows no sign of an increase to accompany the deflation there.

The number of  $M_w$  3 quakes increased and I just assumed that that was magna moving around down there, but what do I know? Sharon hired a guy to get the ash off the roof of the house before it rained because I told her the ash would soak up 10 times its weight in water. Which, for some reason, brings to mind the fact that I've had a ham license for 14 years but never a radio. It's about time we fixed that situation, don't you think? I've got the guns and ammo, again, but it's about time I had a real radio.

Guess what I wanted? Go ahead – guess. But, if you don't say Kenwood TS-2000X, you haven't been paying attention. That isn't what I got, but that's what I wanted. What I got was the Kenwood TS-2000 without the X. The X represented the 1.3Ghz satellite transceiver card and I didn't want to talk to satellites, it was bad enough talking to computers when you called a large company. Anyway the TS-2000 was \$1,599.99, but unless I'm mistaken, that's pretty close to \$1,600. What the heck, we could drive to Lost Wages and pick it and antennas up. It saved on shipping and we could talk about masts. I order a MA-40 from HRO, the cheapest they had, after I talked to the people at AES. It pays to spread your business around.

It took  $1\frac{1}{2}$  yards of concrete to make a  $3x3x4\frac{1}{2}$  anchor for the mast. You can't order  $1\frac{1}{2}$  yards of concrete from ready mix without paying one heck of a premium. I got a guy in with a post hold digger and he dug a series of holes. Then Sharon hired a guy to remove the remainder of the dirt and bring in one of those rental units with  $1\frac{1}{2}$  yards of ready mix. We screed the top of the pour and stuck the bolts in. He said he'd be back in 3 weeks to mount the mast. I got some string and measured the distance to my computer table in the basement and had 5 lengths of RG-213U prepared with connectors.

I used a duplexer to connect the 2 antenna connections to the Comet antenna. I was using the MFJ-1798 and a Comet GP-9. After I priced antenna tuners, it was cheaper to buy another length of cable and put in a separate antenna for the CB base station. By the time the guy got back, I had all 3 antennas mounted and the mast was ready to raise.

We wanted to go see the lava flow, but the NAWC would only let the USGS on the property. That's not fair; we were only 30 miles from the volcano. Stinkin' government. Anyway we were out of debt for the first time in recent memory and I finally had the chance to spend a little of the trust fund money on things I wanted. For 5 years I hadn't seen a dime of the money my father left me. Since moving to Ridgecrest and buying a cheap house and having it paid for, it was my turn. Our house was near the fairgrounds in Ridgecrest right on the edge of town.

We didn't have 2 one-year deluxe supplies of food from Walton Feed and we didn't have a fancy shelter in the backyard in case of WW III. We made a trip to Costco once a month and loaded up, always staying a month or two ahead. We saved on my drugs because I had the Humana deluxe Part D coverage and got my drugs mail order from Wal-Mart. If you order 3 months at a time, you got a discount. I was trying to get Sharon to take early Social Security when she could, just so she could get Medicare too. If she waited until she was 66, I'd probably be dead.

California already had one of the highest taxes on cigarettes and some politician wanted to add another \$3.43 PER PACK tax. If they succeeded, I might be one of the few smokers left in California. The health organizations sponsored the legislation, as if they didn't get enough premiums already. You don't smoke? Fine, good for you. I do and I rarely leave the house so it's none of your business. Menthol is more addicting, too. Take away my smokes and I'd probably start drinking again. Some choice! You heard the #1 cause of liver failure, right? Tylenol – not booze. On the other hand, I had enough THIQs in my brain for 1,000 people so I guess I'd better not.

o

I had as much money tied up in the mast, antennas and cables as I did in the radios. Every time we got a little ahead, I spent it. The only money we were saving was the \$300 a month Sharon got directly deposited to the savings account in the bank in Charles City. That was her Disney pension and I didn't even know the passwords to access the accounts online. I had her change them to something she could remember and the only time I got to spend money was when she took me or gave me permission.

Our house had to be 40 years old, built during the '60s. It had 2 things the house in Palmdale lacked, it was paid for and it had a basement. I'll take that back, it had one other thing, no Amy or 2 grandchildren. The house was so quiet you could hear the clock tick, assuming you weren't mostly deaf like I was. That was ok, I didn't need hearing protection now when I shot, deaf was deaf. Apparently, I read lips because I could only hear people when they faced me.

Sharon says that I'm senile. I looked up senile – of, relating to, or characteristic of old age; or, relating to or exhibiting memory loss or mental impairment associated with aging (dementia). She hit that nail right on the head. Better the nail than me. I can just hear Forrest Gump saying, "My mama says, senile is as senile does." That's ok – everyone has to be something. Owning a closet full of guns improved my disposition dramatically. Even though my hands were numb, I could work the action on the M1911s and the Nazi .32 auto, thanks to Fleataxi.

Damon and I are planning on collaborating on a story just as soon as he finishes the one he's working on and I finish this one. Think later in 2006, right after the lava quits flowing, the terrorists attack and China declares war on the United States. Last year, they ran out of names for hurricanes. The 2005 Atlantic hurricane season officially began June 1, 2005, and officially ended on November 30, 2005; however a storm ex-

ceeded these boundaries (for the fifth time since 1998) with Hurricane Epsilon not dissipating until December 8. They don't get hurricanes in Ridgecrest, either. On the other hand, I didn't know they got volcanoes until I moved there.

Allow me to explain. While I hope and pray that I'm wrong, I think that God intends that I live long enough for WW III to happen and those Ruskies won't be the ones to do it either, it will be those Chinamen. If the terrorists use nukes on the US, I mostly imagine that they get them from Iran. We have our own homegrown terrorists; does the name McVey ring a bell? I'll be darned if I can figure out what motivated him to attack that building in Oklahoma City.

Wiki says, "McVeigh was an anti-government extremist, with a long background in the survivalist movement. He was known to be a keen reader of the controversial book *Turner Diaries*, which describes similar acts of terrorism to the one he perpetrated. Photocopies of pages sixty-one and sixty-two of the novel were found in an envelope inside McVeigh's car. These pages depicted a fictitious mortar attack upon the US Capitol in Washington.

Some investigators contend that Timothy McVeigh and his accomplice Terry Nichols had ties to Islamic terrorism through Ramazi Yousef, a militant who planned the 1993 WTC Bombing, and through a series of meetings with Islamic terror group Abu Sayyaf members in the Philippines. Others suggest he had ties to a radical Christian Identity group called Elohim City near Muldrow, Oklahoma.

I think it's all a crock. To quote the book, "bout 45 seconds after the second round the third one landed on the roof of the south wing of the Capitol and exploded inside the building... We saw beautiful blossoms of flame and steel sprouting everywhere, dancing across the asphalt, thundering in the midst of splintered masonry and burning vehicles, erupting now inside and now outside the Capitol, wreaking their bloody toll in the ranks of tyranny and treason."

"Then, of course, came the mopping-up period, when the last of the non-White bands were hunted down and exterminated, followed by the final purge of undesirable racial elements among the remaining White population ... But it was in the year 1999, according to the chronology of the Old Era – just 110 years after the birth of The Great One (Adolf Hitler) that the dream of a White world finally became a certainty."

It has been suggested by some that the book only serves as a model of how a local grass-roots movement can overthrow a powerful and tyrannical central government, and that this has led to some groups that do not even agree with the white separatist – supremacist movement using it as a model or blueprint for revolution. Not that I don't believe that the Federal Government couldn't use taking down a notch or two, but that *Turner Diary* was stupid, IMNSHO! But, if you believe that crap, you're nuts. Why pollute your mind? God created all people equal and that had nothing to do with religion or the color of his or her skin. It was the people themselves that polluted what God had creat-

ed. We have a ballot box to put the government in its place. And if that fails, we can organize a grassroots movement for a Second Constitutional Convention.

Earl Turner and his fellow patriots face this question and are forced underground when the US government bans the private possession of firearms and stages the mass Gun Raids to round up suspected gun owners. The hated Equality Police begin hunting them down, but the patriots fight back with a campaign of sabotage and assassination. An allout race war occurs as the struggle escalates. Turner and his comrades suffer terribly, but their ingenuity and boldness in devising and executing new methods of guerrilla warfare lead to a victory of cataclysmic intensity and worldwide scope.

The FBI has labeled *The Turner Diaries* 'the bible of the racist right'. If the government had the power to ban books, this one would be at the top of the list. *The Turner Diaries* is the most controversial book in America today and it's a book unlike any you've read! It sounds to me like the FBI accidentally got something right. J Edgar would be proud of them. Does thinking that make me a liberal? I can just hear Forrest Gump saying, "My mama says, liberal is as liberal does." Much of the beginning of the film is the same in the book, albeit Zemeckis's Gump is far more placid and naïve than Groom's abrasive, judgmental cynic; the film's quote of "Life is like a box of chocolates" wholly reverses the novel's sentiment of "Being an idiot is no box of chocolates". In one case of life imitating art, the film's success gave rise to a series of seafood restaurants called the Bubba Gump Shrimp Company, featuring various styles of shrimp and other seafood's, along with a large variety of movie-themed souvenirs. The logo is a smiling shrimp, altered somewhat from the logo used in the film.

o

Somehow, I can relate to cynical. But then, I can relate to senile, too. Though popular among many, Forrest Gump's warm reception was not universal. Particularly outside the United States, the film was viewed as extended and undeserved praise of ignorant naïveté, a stereotypical trait widely associated with Americans in some quarters.

Others, including Lloyd Kaufman note that Gump's successes result from doing what he is told by others, and never showing any initiative of his own, in contrast to Jenny's more forthright and independent character who is shown descending into drugs, prostitution and death.

Still others point out that much like Billy Joel's *We Didn't Start the Fire*, it was a premature overly generous homage to the Baby Boomer generation. Like Joel's 1989 single, the film celebrates what that generation witnessed (but to which it did not contribute), criticizes what that generation condemned (but to which it does not offer corrections), yet absolves it of any responsibility for its shortcomings and failures. Billy Joel isn't so smart, he divorced Christy Brinkley. (Measurements: 36C-23½-35) She has a few wrinkles, but we all get old. Maybe it bothered him that she was taller than him. If we're all so blessed with ignorant naïveté, why does the rest of the world expect us to get their chestnuts out of the fire? Just curious. That's what's going to get us into WW III, getting someone else's chestnuts out of the fire. This time it was Dubya saving the Iraqis from the dictator that his Daddy didn't kill, because he didn't have a mandate. When in the name of God has that stopped us before? It would probably only taken a one little B-83 set at 1.2mT. We could have claimed that it accidentally got loaded on the B-52. You want a mandate? July 4, 1776, man, what a date.

o

I have a list of good and bad things:

Good things:

Cynicism Sarcasm Conservatism Me owning guns

Bad things:

Lawyers Reporters Liberalism California

See how simple life is?

Say, I didn't tell you how big my basement shelter was, did I? I used the entire basement. Put a homemade blast door made with 3 layers of road plate (thanks Chris) at the bottom of the stairs and replace the basement windows with concrete and then a couple of layers of sandbags. When David and Lorrie split up, we got back the upright freezer and that explained how we got a freezer for free. I didn't mind them not being married, but him having 2 women on the string at the same time sort of po'd me.

In terms of spending money on the basement shelter, the only outright purchase I made was a pair of blast valves and the LUWA-150. Those came out of the left over money from the sale of our house in Palmdale. We tossed all of the furniture in the living room and used the stuff I bought when I did my thing back when. Baby and Scrappy torn our couch and 2 easy chairs to shreds. I had to promise Sharon that once we were ready for the end of the world, she could buy 2 new recliners for the living room. It was her idea that I put the generator in the basement in a little soundproofed room. 8 gallons of gas = 13 hours at 50% power. 2,401 divided by  $13 = 185 \times 8 = 1,480$  gallons to get us through WW III.

"Sharon, we have to have more gas."

"I can fix pinto beans."

"No, gasoline for the generator, about 2,000-gallons."

"Have you priced gas lately?"

"\$2.199 a gallon?"

"How much for this one last thing?"

# China Lake – Chapter 4

"Maybe 5 grand."

"Will it keep?"

"Sure it will, we'll add a gallon of PRI-G. But Chevron will treat it as a farm delivery and we'll get the gas cheaper."

The cheapest source of a tank was the gasoline distributor who had a used tank. Sharon had \$3,000 this quarter and that got the tank and 500 gallons of gas. Maybe I should write the Chinese and ask them to hold off until we get our tank filled. Oh, well. The following quarter (September 2006) she got the tank topped off and I told her she could have the last money of the year for 2 recliners and a sofa. She made me promise. I endeavor to keep my word; it's about the only thing I have that's worth anything.

All the rest of that stuff is just tools to get a job done. Yes, they have an armory at NAWC, but I'm not going up against a bunch of Marines just to steal a M16. By the way, my wheelchair has arms so I could lay the M1A across the arms on my way to WW III. Thing was, it wouldn't hold enough charge to get me to Coso Junction so I could get a peek at Coso Peak. However, a Bakersfield news chopper got close enough with a long-range lens that we could see the growing volcano. Looked just like a pile of black rock with red stuff oozing out.

Coso Junction is on 395 about 41 miles north of Ridgecrest. The volcano was east of there on the NAWC. I didn't care, you seen one lava flow, you've seen them all. Besides, we did have the news footage. I don't mean to rush this, but nothing happened until December 4th when Sharon got the money for the recliners and sofa. I wanted leather, but she got a floral print, which cost just as much as the leather. It's just a darned chair and I didn't like the new Phillips TV she bought in the fall of 2005 anyway, I couldn't hear it. I did my obligatory sit in the new recliner for an hour and then took off for the basement. My trusty Panasonic was in the basement with my DVD player so I watched TV down there. Never a dispute over what to watch! She watched Dr. G cut up dead people and I watched the History Channel. One of these days, we're going to win WW II; I feel it in my bones. We're kicking the Jap's behind.

o

I didn't figure the Chinese would attack Taiwan until spring of 2007, why go to war in bad weather? Taiwan's climate is marine tropical. The rainy season lasts from June to August during the southwest monsoon, though cloudiness is persistent and extensive all year. China could attack any time it wanted to. By now our little volcano was old news. We were ready for the next disaster. The 2006 hurricane rivaled that of 2005 but New Orleans didn't get hit. They hadn't cleaned up from the last one.

The city is ready to demolish some 2,500 houses deemed threats to public safety because of damage from Hurricane Katrina, but opponents said Saturday they will sue to stop the work to make sure homeowners' rights are respected.

City officials said inspectors had examined roughly 128,000 homes on New Orleans' east bank of the Mississippi River. About 4 percent, or 5,534 homes, were marked with red stickers as being unsafe to enter and must be razed, said Greg Meffert, the city's chief technology officer, who also oversees the Department of Safety and Permits. Only about 2,500 red-tagged houses that pose an imminent public hazard will be demolished immediately in the next few weeks. The remaining 3,000 will get a second inspection.

City officials are trying to locate homeowners to alert them in case they want to remove any belongings before the demolition, he said.

However, a coalition of individuals and groups announced Saturday that they're preparing to file a lawsuit to block the city from bulldozing houses without legal due process.

"The city of New Orleans knows full well that they are bound by the constitutions of the United States and the state of Louisiana," said Loyola Law School Professor Bill Quigley. "Both constitutions require real prior notice and a meaningful opportunity to be heard before the government can take or destroy anyone's property."

The lawsuit likely will be filed this coming week, said Quigley, who, along with the Advancement Project of Washington, DC, and the Peoples Hurricane Relief Fund is seeking to protect residents' rights.

"It is now nearly four months after the damage. No emergency exists that would allow the city to trample the constitutional rights of property owners without due process," he said.

Tell the truth, I think that they just want to hold the government up for some money. Do you want to know the real story about the levees in New Orleans? Chapter 5 contains and adapted version of the story. Nagin and Blanco simply acted stupidly.

o

The USS San Antonio is a ship of distinctions – it's the Navy's first ship designed entirely on computer, the first with "gender-neutral" quarters, first of its class and first to bear the name of the Texas city.

But there's also a dubious distinction for the San Antonio: Its price, \$1.76 billion, is almost three times its projected cost a decade ago.

The 684-foot-long troop transport built by Northrop Grumman Ship Systems will be commissioned Jan. 14 at Ingleside Naval Station near Corpus Christi, Texas.

The ship's saga is in part the story of a 21st-century Navy whose goal of a 313-ship fleet is jeopardized by rising costs.

Some of the San Antonio's problems stem from the nature of being a first-of-class ship. But even the Navy has been unhappy with the ship's progress.

Originally pegged to cost about \$644 million by the Government Accountability Office, the ship is more expensive than the Navy's Arleigh Burke-class guided missile Aegis destroyer, which averages \$1.3 billion to \$1.4 billion.

"It's a troop transport with a lot more features, but it's still basically a troop and equipment transport," said naval analyst Norman Polmar. "For us to pay that much when we can buy an Aegis guided-missile destroyer for [about] \$1 billion, it's ludicrous."

Budgets for the San Antonio and the second ship in its class, the USS New Orleans, have grown by \$1 billion, according to a February 2005 GAO study.

Still, the San Antonio is the cheapest of five new ship systems, the priciest being the CVN-21 aircraft carrier. The first ship in that class is to cost \$10.5 billion, according to a recent Congressional Budget Office report.

The GAO's February report said increases in labor and material costs accounted for two-thirds of the ship's cost growth.

Of the eight ships in President Bush's 2005 budget, the GAO found that the San Antonio had the worst cost overrun, \$804 million. That's twice as much as the USS Virginia, a \$3.7 billion nuclear attack submarine.

Designed to ferry Marines into battle, it's the only amphibious troop vessel capable of withstanding the air pressure generated by a nuclear blast, and it can protect its sailors from radioactive fallout and biological weapons.

But the high-tech defense network didn't dent a Navy Board of Inspection and Survey report that found deficiencies throughout the vessel.

The inspectors wrote up 107 "starred cards" given for equipment that needed to be repaired. They rated craftsmanship standards as "poor." Workers left a "snarled, overpacked, poorly assembled and virtually uncorrectable electrical/electronic cable plant."

The inspectors said watertight integrity was compromised throughout the ship by multiple cable lines.

This week, the San Antonio's program manager and the ship's captain said the cable plant and watertight-integrity issues had been resolved.

I guess that's good, it won't sink when it's launched. But, given the choice, I'd take the destroyer and I know that they float, or was that Hope?

o

If the government moves slowly and carefully, they can get all of the boomers out of port at once. While it possible that other countries may notice the absence, it is equally possible the no one in the US would put 2 and 2 together. They could probably excuse the absence of a couple of the west coast boomers by claiming they were doing sea trials to check out this or that repair. They could further claim that one or two of them were down in Pearl Harbor for this or that. More likely, they'd said they didn't know what the questioner was talking about.

The carriers are bigger and having all of them out of port at once could draw attention. I suppose that's why the Pentagon announced war games taking place east of Hawaii. The only absence they had to deal with was the absence of the boomers. At a Pentagon press conference, Rumsfeld mumbled some double talk that was so confusing that the reporter forgot the question. Seven of the carriers were based on the east coast and five on the west coast including the Kitty Hawk in Japan. Why then did the Navy send 2 carriers around the tip of South America to negotiate the Straits of Magellan and join in the war games off Hawaii? The previous ship to make the voyage was the USS Reagan when it was transferred to its homeport of San Diego.

It is in my very nature to believe in conspiracies. If they moved the boomers around, there were 9 in the Pacific now, and moved 2 carriers from the Atlantic to the Pacific, it seemed to me that they were massing power. It also occurred to me that the US Navy didn't need to mass power to have war games. Let's face it, when you move a carrier, you're not just moving one ship but a small fleet. Typically a Carrier Strike Group might have: a carrier, two guided missile cruisers, a guided missile destroyer, a destroyer, a frigate, two attack submarines, and a combined ammunition-oiler-supply ship. A Battle Group was a Strike Group that included amphibious ships to carry the Marines.

How come I could pick it up and the reporters couldn't? The only way the government could quiet the press was by invoking the clear and present danger constraint. Following Schenck v. United States, *clear and present danger* became a standard test in cases where a United States law limits free speech; the law is deemed to be constitutional if it can be shown that the language it prohibits is language that poses a *clear and present danger*. The decision Schenck v. United States, which had established the *clear and present danger* test was overturned in Brandenburg v. Ohio and *Imminent lawless action* thus became a test that replaced *clear and present danger* in determining the types of speech that were to be treated as free speech to be protected by the Constitution.

A short but interesting section of Douglas's opinion indicated that he might be open to allowing the government greater latitude in controlling speech during time of *declared war* (making clear that he was not referring to the then-current Vietnam conflict), alt-

hough he only phrased that possibility in terms of doubt (as opposed to his certainty that the clear and present danger test was irreconcilable with the First Amendment during time of peace). When the US was preparing for war and revealing that information to a possible enemy could constitute a *clear and present danger*, it might be possible for the government to exercise prior restraint, despite what the media might think. BTW, Brandenburg was a KKK who preached hatred. He was just the type of guy you'd want to shut up.

o

Let's see,  $9 \times 24 \times 8 = 1,728$ , and  $1,728 \div 400 = 4.32$ . But what if it was  $1,728 + (21 \times 16) = 2,064 \div 400 = 5.16$ ? (Just making sure my math still worked.) Nah, they wouldn't dare. That would be just plain stupid. On the other hand, so was attacking Pearl Harbor, even Yamamoto knew that. Winston Churchill knew that all you had to do to get the Americans to gang up on you was really piss them off.

One ought never to turn ones back on a threatened danger and try to run away from it. If you do that, you will double the danger. But if you meet it promptly and without flinching, you will reduce the danger by half.

And the true source to the old jokes:

Churchill: Madam, would you sleep with me for five million pounds? Socialite: My goodness, Mr. Churchill... Well, I suppose... we would have to discuss terms, of course... Churchill: Would you sleep with me for five pounds? Socialite: Mr. Churchill, what kind of woman do you think I am?! Churchill: Madam, we've already established that. Now we are haggling about the price.

Lady Nancy Astor: Winston, if you were my husband, I'd poison your tea. Churchill: Nancy, if I were your husband, I'd drink it.

Bessie Braddock: Sir, you are drunk. Churchill: And you, madam, are ugly. But in the morning I shall be sober.

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No doubt knowing that China had 2 spy satellites, Bush moved the ships and boats as a warning. The Chinese are inveterate gamblers. Would they call his bluff? God, I hope not, Dubya has a Royal Flush. The odds of getting a Royal Flush are 1 in 649,740. And everyone in the world has probably heard of NORAD. Nah, they wouldn't dare. I figured the odds favored Yellowstone erupting before the Chinese would dare attack the US. I didn't even bother keeping any of the magazines loaded except for the Nazi .32.

The lava was still flowing, but slowing down when Sharon I and made our January trip to Costco in Lancaster. I grabbed extra 50# bags of jasmine rice, pinto beans and 18
cans of coffee. We also got flour, sugar, shortening and a few other things. Then we went to a smoke shop and bought me 24 cartons of Kools. I had this itch I couldn't explain. I wasn't scheduled to see Dr. J until February. We'd go to Northridge, see him and shop at Costco on the way home. And, since it was January, it was time to order another 90-day supply of pills. They came in about 3 days and they hit my ATM for the copay.

On January 15, 2007 TSHTF. Apparently, the Chinamen thought George was bluffing. Dumb. He'd said he was going to wage war on terror and he did. Why did they think he wouldn't react when they attacked Taiwan? You have to give ol' Dubya credit; when he said he was going to do something, he did it, even if he shouldn't. The Chinese launched an air attack on Taiwan. The Taiwanese and we shot most of them down. They launched a missile attack on Taiwan and the RIM-161s and Pac-IIIs shot them down. They sent IL-76 transport planes to parachute in paratroopers and we shot those down. Then they launched Silkworms and we stopped them. The Chinese had lost so much face that they looked like Jim Carrey in Mask.

The only planes missing from the show were those 40 TU-22M bombers and 8 IL-78s. I didn't know that at the time or I'd have been in the basement with the door locked. Oh, I was in the basement but the door was wide open. The refrigerator that came with the house was in the basement and ours was in the kitchen. Our propane (converted) stove was in the basement along with 10-100# bottles. We had jets to convert the furnace and hot water heater.

Those Backfires must have been wave hopping, we never saw them coming. And unknown to us, the US was at DEFCON 3 and the B-2s were loaded. When the planes were about 30 minutes from the coast, the Chinese launched all of their ground-based missiles. I helped Sharon carry the contents of the frig to the basement and turned off the hot air registers upstairs. We went to the basement, locking the heavy steel door behind us. I'd never seen a world end before so I put on the TV. Then the phone rang and Sharon gave Amy and Lorrie our address. Apparently Lorrie, Amy and the 3 kids were north bound and down, pedal to the medal. I never made it from Palmdale to Ridgecrest in under 1¼ hours, flying. You didn't know? Bimbo #1 was originally from Trona and her sister lived in Ridgecrest.

The expression is TEOTWAWKI, The End of the World as We Know It. It should be TEOCAWKI, substituting 'Civilization' for 'the World'. If you're a boomer, you may have already recognized that it's happening. Listened to any Rap music lately? I think some kids who get high school diplomas can barely spell their names. All a war would do is accelerate the process. Gibbon wrote *The History of the Decline and Fall of the Roman Empire* from 1776 through 1788.

According to Gibbon, the Roman Empire succumbed to barbarian invasions because of a loss of civic virtue among its citizens. They had become lazy and soft, outsourcing their duties to defend their Empire to barbarian mercenaries, who then became so nu-

merous and ingrained that they were then able to easily take over the Empire. Romans, he believed, had become effeminate, unwilling to live the military lifestyle.

In addition Gibbon attacked Christianity. Christianity, he says, created a belief in another world, which is to say that a better life existed after death. This fostered indifference to this life among the Roman citizens who believed they would live a better life once they died, thus sapping their desire to maintain and sacrifice for the Empire. He also believed its comparative pacifism tended to sap the traditional Roman martial spirit.

Gibbon's methodology was so accurate that, to this day, little can be found to controvert his use of primary sources for evidence. While modern historical methodology has changed dramatically, his skill in translation of his sources is considered impeccable. Contemporary historians still rely on Gibbon as a reliable secondary source to substantiate references and for citations. His literary tone in the History is out of date to modern readers, and is always described as skeptical and pessimistic. However, it mirrors both the man and more importantly, the topic of his great work: the gradual decay of a mighty empire. Since its first publication, the title has been shortened from *The History of the Decline and Fall of the Roman Empire* to *The Decline and Fall of the Roman Empire*.

Does the name George Santayana ring a bell? The lessons were clear, what a shame. Italy is still there, but the Romans are long gone. Every great civilization is gone. We can all remember when Britain was the top dog, assuming they still teach history. I've lived long enough to see the Decline. I might get in on the beginning of the Fall. Now they want to eliminate citizenship based solely on the fact that you're born in the USA. It occurs to me that we have a new occupation for morons – politician.

We didn't outsource our military like the Romans did, but we outsourced everything else. It's cheaper to build Levis in China. Call SBC or Dell for customer service and you get Bombay. It takes about 15 minutes to explain the problem and an hour not to get the solution. That's why I fixed my computer myself. Back in early December or late November, I picked up a computer virus. What it did was to interfere with my Symantec Anti-Virus program. I fixed it myself using backdoor techniques. I downloaded Live Update and then downloaded the new virus tables. A little bit later, Symantec discovered the virus all by itself and my computer was repaired. The government doesn't send you emails with attachments. Stupid me.

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Know what the end of the world sounds like? 2 girls pounding on your blast door yelling, "It's us. Let us in." I only had one TV in our basement and none of those games they hookup to the TV to mess it up. I was watching the end of the world on TV, I didn't want any interruptions. The Backfire C bombers were equipped with missiles, not bombs. The Backfire can carry 10 Granat missiles, each equipped with a 200kT warhead, or 3 AS-4 Kitchen missiles equipped with 350kT warheads, assuming the Chinese could build them. They should be able to, they and the Japanese can copy anything. It wasn't as cold in Ridgecrest this winter, maybe because of that new heat source 30some miles away. Or, maybe not. According to the Bakersfield TV station (KERO), the lava was flowing slower, thus beginning to build a small mountain or volcanic cone. These kids have rules. Rule one, when you enter grandpa's door, start screaming.

# "SHUT UP! IT'S THE END OF THE WORLD, AND I WANT TO HEAR THE BLOW BY BLOW!"

Initial heading from Avila Beach to Ridgecrest: east 78.9°, 176 miles. The TV went dead and I heard the generator fire up. The TV came back on but the screen was blank, nothing but snow. Darn it, I missed it. I checked my computer, re-entered the password and tried to get on the net. Nothing, Nada, no go. That confirmed cable was out so I went to plan B and tried to dial up with my modem. It couldn't get a dial tone. Oh, well, film at 11, in about a month, maybe.

Did you ever notice how TV starts telling you around 8pm, 7pm central, what's going to be on the news but won't tell you the story? I look it up on the net and don't bother watching the news. When the news finally does come on, their lead story is the one they talked all about since 8pm, but they don't report it until 11:15. They always have some breaking news story that's so new they don't know anything and spend 14 minutes guessing what might have happened.

Life is like a box of chocolates, because you never know what you're going to get.

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EDGEFIELD, SC – Engineer Paul Green wheels his company's new fully armored combat vehicle over the clay roads and muddy streambeds of the South Carolina backcountry, guns the engine and races over one hill and then the next.

"This is designed to be what we thought would be a step up from the Humvee," he shouts as he shifts gears. "This vehicle was never designed to be a direct replacement for the current armored Humvee."

But the prototype – christened the MUV-R (Mine-protected Utility Vehicle/Rapid Deployable) by its manufacturer, Charleston, SC-based Force Protection, Inc. – may well be.

The Department of Defense has not publicly called for replacing the Humvee, yet several companies are developing more advanced armored utility vehicles in response to the deadly roadside bombs being used by insurgents against US forces in Iraq and Afghanistan.

Lt. Col. Keir-Kevin Curry, an Army public affairs spokesperson at the Pentagon, would not divulge whether officials desire an alternative to the Humvee, only saying, "soldier protection is our No. 1 priority. Everything we do is built around that priority."

"As new technologies emerge, the Army is aggressively working with industry to develop, test, produce, and rapidly field the best possible equipment, and get it into the hands of our soldiers in the field as soon as possible," Col. Curry said.

Although attacks by roadside bombs, which the military calls improvised explosive devices (IEDs), are decreasing in frequency since they became widespread in 2003 in Iraq, the sizes of the explosive charges are increasing.

"For the first 10 months of 2005, IED attacks accounted for 43 percent of US fatalities in Iraq," says John Pike, director of Alexandria-based GlobalSecurity.org, a defense and intelligence think tank.

The Humvee replaced the Jeep two decades ago, and has since performed well in the post-Cold War's lighter, flexible army.

But Humvees, manufactured by AM General, were not designed to protect against mines, IEDs and missile threats.

Department of Defense efforts to add armor to its Humvee have been problematic: the additional weight strains the vehicle's engine, and seams between armor plates are vulnerable to blast energy.

"Humvees also have unprotected engine compartments," says Chris Berman, a Navy SEAL reservist and president of Kuwait-based Granite Global Services, which produces an armored urban (not off-road) combat vehicle known as the Rock. "One shot to the engine, the Humvee is stopped and subject to additional attack."

In 2004, Mr. Berman was working as a Blackwater USA security officer when fellow Blackwater contractors in soft-skinned SUVs were ambushed and killed in Fallujah, Iraq.

After escorting their body's home, Mr. Berman committed to building a vehicle that he says "would save lives."

Today his new 7.5 ton armored "Rock" – in service with both private contractors and Department of Defense agencies – has been struck by at least five IEDs, and all passengers have survived without injury. It's a different story for those soldiers and Marines who continue to travel Iraqi highways in up-armored Humvees.

When IED-attack reports first began streaming in, the Pentagon began looking into blast-protective designs similar to those of the old South African army and police vehicles. Those designs included seamless single-piece armor hulls with V-shaped bottoms that naturally provided better side impact protection from IEDs and below-vehicle blasts from mines.

Today, companies such as Force Protection, Granite Global Services, General Dynamics and Textron Systems are building similarly designed vehicles for tasks such as mine clearance and troop transports, and developing or conceptualizing prototypes to possibly replace the Humvee as the military's utility vehicle.

AM General could not be reached for comment about Humvees.

There are about 120,000 Humvees in Army service and 20,000 in the Marine Corps.

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And so, one piece by Rose rants at a driver who tosses a handful of trash into an already waste-filled city. A column by the paper's feature editor, James O'Byrne, wonders how a federal government with *blood on its hands* from its failed levees could question the wisdom of rebuilding in his once lovely Lakeview neighborhood. *Why do they hate us*? the outdoor editor asks in another column, so palpable has the fear of being forsaken become. And a star investigative reporter tries to head off television's "60 Minutes" from reporting that New Orleans could be doomed to sink beneath the Gulf of Mexico.

Times-Picayune Editor Jim Amoss took the central message right to the federal government's doorstep last month, with an op-ed piece in the Washington Post. *We want word from Washington*, said the New Orleans native, *that a great American city will not be left to die.* 

LIE, it wasn't the government's fault. Forget it, the next chapter is an adapted version that story, you know I have a couple of weeks to kill down here in the basement anyway. I also have a couple of grandchildren in dire need of killing.

What's love got to do, got to do with it? What's love but a sweet old-fashioned notion? What's love got to do, got to do with it? Who needs a heart when a heart can be broken?

I'm your private dancer, a dancer for money I'll do what you want me to do I'm your private dancer, a dancer for money And any old music will do.

# China Lake – Chapter 5

#### Levees Weakened as New Orleans Board, Federal Engineers Feuded

By Stephen Braun and Ralph Vartabedian, Times Staff Writers

NEW ORLEANS – When the US Army Corps of Engineers and New Orleans levee officials joined forces in July 1985 to protect the city from a long-feared hurricane, the two agencies could not agree on how to proceed. It was the beginning of a dysfunctional partnership that ushered in two decades of chronic government mismanagement.

Corps engineers wanted to install gates in front of the city's three main internal canals to protect against violent storm surges from Lake Pontchartrain. The Orleans Levee District, the city's flood protection agency, preferred to build higher floodwalls for miles along the canals. For five years, neither side yielded.

But in October 1990, a deft behind-the-scenes maneuver by the levee board forced the corps to accept higher floodwalls. As Senate and House negotiators gathered to craft the Water Resources Development Act of 1990, Louisiana's congressional delegation quietly inserted a lobbyist's phrasing ordering the corps to raise the levee walls.

"It was stealth; legislative trickery," recalled New Orleans lawyer Bruce Feingerts, who lobbied for the levee board. "We had to push every button at our disposal."

The gambit was a crucial victory over the corps by the Orleans district, the most powerful and well financed among 18 Louisiana boards that supervise more than 340 miles of storm levees across the hurricane-prone southern half of the state. The corps had to abandon its floodgate plan and shoulder 70% of the project's costs while allowing the Orleans board to hire its own consultants to design the strengthened levees.

But their fractious partnership proved disastrous. While the corps and the Orleans board settled into an acrimonious 15-year relationship, spending \$95 million to buttress the city's canal levees, their shared supervision failed to detect crucial weaknesses inside the flood walls before Hurricane Katrina struck.

"No one felt the urgency, none of us," said Lambert C. Boissiere Jr., a former Orleans levee commissioner. "The corps and our own engineers told us the levees were strong enough. They were all dead wrong."

Structural inspections were cursory. Maintenance was minimal. A confusing regulatory patchwork of ownership over the levees and canals blurred the lines of authority – all shortcomings cited by independent engineering teams analyzing the levees' collapse.

Although the corps and federal officials kept a tight leash on funding, the Orleans board spent money lavishly, diverting resources to high-stakes investments such as casinos and marinas. The levee board's unusual authority to hire its own consultants allowed its

officials to select firms that regularly gave campaign contributions to politicians with influence over levee board business.

Left unchecked because of repeated failures by the Louisiana Legislature to reform the levee board system, critics say, the Orleans district operated its own patronage system.

"The New Orleans board had the reputation of being one of the worst – by worst, I mean more political than professional," said former Louisiana Gov. Charles E. "Buddy" Roemer III, a Republican whose Orleans board appointees launched the 1990 power play in Congress.

When Katrina hit in late August, floodwater from Lake Pontchartrain burst through the walls of the 17th Street and London Avenue levees, where steel foundations gave way in porous soil. Storm water also flowed through a 200-foot gap in the Orleans Avenue levee, a section left unfinished due to Bush administration funding cuts.

Last week, the corps announced plans to seal off the three broken canals with permanent barriers and relocate New Orleans' pump houses from inside the city to the lakeshore – at a cost of \$3.1 billion. The corps' move to abandon the old flood-control system it built with the Orleans board came as a bitter coda to a 20-year relationship.

Money was the most pressing concern in July 1985, when Orleans levee officials signed "assurances" – an official commitment – to join the corps in buttressing New Orleans' hurricane protection system.

The corps' traditional preference for a "least cost" project made floodgates a far more attractive option – at \$20 million – than the \$60-million estimate for raising the levees.

"We were caught between the [Reagan] administration saying keep the cost down, and Congress and New Orleans officials saying spend more," said Fred H. Bayley III, then the corps' director of engineering for the Lower Mississippi Valley Division.

But the corps' proposed "butterfly-valve gate" – a concrete-and-steel barrier that would open to let out water and close to seal off storm surges – was untested in high storm conditions.

The corps' plan also clashed with the city's practice of using its system of antiquated pump stations – two miles inside the city – to force floodwater out into the lake through the canals. Officials with the New Orleans Sewerage and Water Board who supervised the canals feared that in a major hurricane, the gates would jam with debris and canals would back up, submerging the city.

Corps engineers had been fixated on floodgates since the 1970s, when the agency proposed using towering gates to block off surges at the far eastern end of the lake. That plan was the corps' response to Hurricane Betsy, a storm that hit New Orleans in 1965, swamping the city's Lower 9th Ward, killing at least 75 people and causing more than \$1 billion in property damage.

Louisiana's congressional delegation, led by Democratic Sens. Russell Long and J. Bennett Johnston, won legislative approval for the barrier plan. But by the early 1980s, the project was shelved, scuttled by a judge's order, opposition by environmental and business groups, and bickering levee boards.

The corps, convinced that raising levees was risky, shifted its plans, proposing to build gates at the lakeshore. Higher floodwalls required deep sheet piles – heavy-gauge steel foundations – sunk into the soft coastal soil to brace against water pressure.

To raise the levees properly, corps engineers warned that houses along the 17th Street and London Avenue levees might have to be razed. But the corps refused to absorb the costs, and the levee board shied from taking on neighborhood groups a pivotal early error.

Eager to show off their prototype, corps engineers herded city officials into the Army's cavernous Hydraulics Lab in Vicksburg, Miss. The hinged doors opened and closed easily. But city sewerage officials peppered the engineers with doubting questions.

Indeed, according to a November 1987 corps report, the "original design did not perform as intended." Only when corps engineers altered the model, "the gate design performed satisfactorily."

Despite the skepticism, corps officials moved firmly to clear a path for the floodgate plan. The corps ruled that it would not pay for raising the levees because the city's canals were used for local drainage, not navigation – beyond the scope of the corps' authority over river and waterway projects.

The decision forced Orleans levee officials to gamble. Although the corps refused to pay for raising the levees, the Lake Pontchartrain, La., and Vicinity High-Level Plan was still in its planning stages. Under the drawn-out design process, levee officials still had the ability to research their own alternative – at the board's cost.

They aimed to keep the levee-raising option alive by hiring their own design consultants, then using political leverage to win their levee-raising plan later.

From the Orleans levee office on Stars and Stripes Boulevard to the governor's mansion in Baton Rouge, Louisiana's political veterans knew the unstated rules of the leveebuilding game.

There were scores of qualified civil engineers in New Orleans, all angling to score lucrative public contracts. Many firms boasted former corps engineers who knew how the corps worked and had friends still in the service. "The corps had these relationships with the levee boards," Roemer recalled acidly. "In their conversations, the levee board would ask the corps: 'What do we need to do to have safety and economic development?' And the corps would give unofficial answers. Then the levee board would hire a consulting engineer and go to the window the corps had opened. It was sweet."

Normally, the corps used its own contractors to design and build flood-control projects. But with the corps' approval, levee boards could hire consultants as a way to pay their 30% local share of a project's cost. In hindsight, said the corps' commander, Lt. Gen. Carl A. Strock, the decision to let the Orleans board hire its own contractors was "an unusual practice for us."

Some corps veterans worried about the intrusion of local politics and budget complications. "Generally, when there were more layers involved, it got more difficult," Bayley said.

The political lines stretched to Louisiana's governors, who chose the majority of commissioners on local levee boards. In 1985, the power in Baton Rouge was Roemer's predecessor, Democratic Gov. Edwin Edwards, who had installed New Orleans lawyer Emile Schneider as levee board president.

Schneider moved quickly. The board issued \$50 million in bonds, then began hiring private engineers. The consultants were chosen on their qualifications. But politics and hiring sometimes mixed, said former commissioners.

All three engineering consultants who were selected by the Orleans board to design the levees contributed to the political campaigns of officials with sway over the board.

Burk-Kleinpeter Inc., the engineering firm that designed the raised London Avenue floodwall, gave \$5,000 to Edwards in 1991 before he won the 1992 governor's race. Walter Baudier also donated during the period that his firm, Design Engineering Inc., planned the Orleans Avenue levee. Baudier gave \$2,200 to Roemer in 1987 and \$3,000 to Edwards in 1991.

"Everybody gave to everybody," Baudier said. "That neutralized any advantage."

Baudier's firm was also awarded a separate contract with the Orleans district, coordinating other levee board projects. Louisiana's legislative analyst criticized the arrangement in 1992, warning of potential conflicts between the firm's dual roles. Baudier insists his firm dealt only with financing and did not "review other people's designs."

Levee board contractors also frequently gave campaign money to Francis C. Heitmeier, a powerful state legislator from New Orleans who has long wielded influence over Orleans levee district affairs.

Among Heitmeier's donors from 1996 through 2002 were Baudier (\$5,000), Burk-Kleinpeter (\$10,000), and Modjeski and Masters Inc., an engineering firm that designed the 17th Street levee (\$750). Officials with Burk-Kleinpeter and Modjeski and Masters did not return calls seeking comment.

For years, former Orleans levee officials say, Heitmeier, who headed the state Senate's public works committee and now its Finance Committee, was influential in levee board decisions on hiring, policy and contracts. Roemer was stymied by Heitmeier when he tried to reform the levee board system and wrest contracts away from local authorities. His "biggest battles," Roemer said, were with Heitmeier.

Just last month, Heitmeier again played obstructionist, helping to snuff out a post-Katrina attempt by reformers to create a unified state levee board. Critics howled. Heitmeier shrugged.

"They can say what they want," he said.

By 1990, faced with spiraling costs for its gates at the 17th Street canal, the corps agreed to pay for raised levees there. But the corps still insisted on gates at Orleans and London avenues.

Even before the corps made its concession, the board had acted on its own, hiring a construction firm to drive sheet piles at 17th Street.

The Orleans board's impatience with the corps was shared by neighboring levee agencies. In recent years, Plaquemines Levee District President Benny Rousselle twice ordered crews to raise levees along a local highway despite formal corps orders to desist. And earlier this year, the East Jefferson Levee District bolstered its side of the 17th Street levee by a foot and a half without the corps' approval.

"When you deal with the corps, it takes years of studies," Rousselle said.

Corps engineers were openly peeved in 1990 when they learned about the Orleans board's decision. The move posed "an undesirable situation for this office and the corps," Bayley wrote to the corps' district commander.

Bayley also warned that work crews were not driving the steel foundations deep enough. It was the first alarm about shallow sheet piles under the levee.

Despite the corps' recent insistence that 17th Street's foundations were properly designed at 17 feet below sea level, a National Science Foundation team of engineering experts has described the pile depths as inadequate.

By autumn of 1990, the Orleans board had also quietly hired Bruce Feingerts, a former aide to Russell Long, to lobby in Washington for levee expansion. Feingerts had discovered that the levees of Orleans and London avenues might win federal funding if he

could persuade Congress to expand the coverage of the post-Betsy hurricane plan passed in 1965. Sens. Johnston and John B. Breaux agreed to help, Feingerts said, as did most of the state delegation.

When Senate and House versions of the 1990 Water Resources bill neared passage in October, Feingerts went into action.

Johnston recalled that former Louisiana Rep. Jimmy Hayes was the "point man" as a House manager for conference negotiations.

Now a Washington lobbyist, Hayes did not respond to interview requests. But a former aide, Rhod Shaw, said he often aided New Orleans projects and "would have been carrying whatever the delegation wanted."

The military engineers were "asleep at the wheel," Feingerts said. "If they had seen it coming, they would have blown a gasket." The final bill passed with his language intact: "The conferees direct the corps to treat the outfall canals as part of the overall hurricane project."

As new levee construction projects geared up at Orleans and London avenues, work crews at the 17th Street canal were struggling with construction obstacles. Unable to operate from the landside of the canal because property lines backed tightly up against the levee, construction crews had to maneuver by barge up the canal with a 300-foot crane to drive steel piles and raise the concrete wall.

Lakeview resident Bud Thaller stormed outside one day when his house began to shake violently. A levee crew driving foundations at 17th Street with a vibrating hammer had just struck a sandbar. The foreman shrugged when Thaller approached.

He told me they were having a hard time getting the piles in," Thaller recalled.

Boh Brothers, a Louisiana construction firm, was the first of three companies to drive sheet piles under the levee walls. They were joined by concrete specialists, some working for the Orleans board, others hired by the corps and the sewerage board. A parade of inspectors and engineers also crowded over the site, so many that "it could get confusing," recalled Boh Vice President Dale Biggers, then a crew foreman.

The corps was always the final authority – even overseeing the number of hammer blows used to drive in the sheet piles. But on any given day, crews also had to coordinate with state and city officials and inspectors for Modjeski and Masters, the levee board's design consultant. The question of who performed the inspections is crucial because engineering experts have had difficulty learning how on-site decisions were made. "No one was in charge," said Raymond Seed, a UC Berkeley engineering professor leading a National Science Foundation inquiry. Seed's team has heard allegations that piles were deliberately shortchanged. The Justice Department is investigating.

Structural engineer Herbert J. Roussel Jr., who testified for a construction firm that sued the corps during one dispute, recalled Army engineers as dismissive: "The corps had an attitude problem. It was: 'We're the Army Corps of Engineers. We know what we're doing and you don't.' "

Levee board officials complained about excessive corps delays. "They were slow. We'd come up with a design, and the corps would always send them back," Boissiere said.

Army engineers raised their own complaints. Baudier's firm was removed as Orleans Avenue designer in 1992, accused by the corps of missing deadlines.

As sections of the floodwalls were finished piece-by-piece through the mid-1990s, the levee board's emphasis turned to the mundane chores of grass-cutting and mainte-nance. That left ample time for board business that had little to do with flood protection.

When lawyer Robert Harvey was installed as the Orleans district's president in 1992, the levee board was a recreation powerhouse. A year after Mississippi River floods swamped New Orleans in 1927, Louisiana political legend Huey Long had prodded the state Legislature to allow the Orleans board to expand its influence into parks, beaches and other "places of amusement."

By the late 1980s, the board operated an airport, two marinas and lakeshore rental properties, but the agency was hemorrhaging money. Leases went unfilled at the airport, and its South Shore Marina had too many vacant boat slips.

Instead of scaling back, Harvey accelerated the board's outside interests. The toughtalking lawyer won his post after contributing \$5,000 to the 1991 campaign of Gov. Edwards, an old friend.

"It's a plum job," Harvey recalled. "Your connection with the governor is close. You have 300 employees, lots of contracts."

When Edwards pushed for state gambling – a position that led to his federal corruption conviction in 2001 – Harvey wooed the Bally's gambling empire to locate a casino boat at a dock owned by the levee board.

The boat brought in millions in gambling taxes, but other Harvey projects fell flat. A flirtation with film studios went nowhere. A series of probes by the state auditor found cases of financial mismanagement, conflicts of interest and risky investments. At one point, six attorneys were working for the board without formal contracts. And Harvey was accused by the New Orleans Metropolitan Crime Commission of padding the levee board payroll with old friends. The controversies took their toll. Harvey resigned in 1995, followed by an FBI probe of his levee board tenure. "They didn't find anything," Harvey said.

His successor, James P. Huey, waded into his own controversies. Huey's board hired his wife's first cousin, George Carmouche, as a lobbyist in Baton Rouge. After Katrina struck, the board sublet a Baton Rouge office from Carmouche. And Huey pocketed nearly \$100,000 in back pay, failing to first obtain permission from state lawyers. He returned the money after resigning under pressure.

Huey, who did not respond to interview requests, is under investigation by state and federal authorities.

At the same time, the newly raised floodwalls received haphazard scrutiny.

Harvey recalls staring jealously at East Jefferson Levee District's well-trimmed border of the 17th Street canal, then at untamed foliage and trees massed along the Orleans levee wall. "I'd look at the Orleans side and get depressed," he said.

Neither the corps nor the Orleans board had a rigorous program for scanning for structural defects. Instead, the two agencies joined twice a year for five-hour-long inspection tours. A caravan of officials would make random stops along the floodwalls. Sometimes corps officials issued citations. Then they would head out for long lunches.

"That was always on the agenda," said former Orleans commissioner Peggy Wilson.

On one tour, Wilson was joined by only one other levee board official. When they stopped briefly at the levees, corps officials seemed in a rush. "I kept asking them what I was supposed to look for, puddles of water?" she said. "They said, 'Oh, don't worry.' "

The agencies relied largely on maintenance crews and neighbors to flag levee problems. "If something structural came up, we'd tell the corps," said retired Orleans levee board crewman Ed Robbins.

But at 17th Street, corps engineers were a rare sight, recalled Eric Moskau, a commercial real estate agent who has lived near the flood wall since 2001.

"I'd just see them driving out near the walls," Moskau said. "I always wondered exactly what they did out there."

When Katrina's swells blew out huge chunks of 17th Street's cement wall on the morning of Aug. 30, Harvey was prepared for disaster.

Years of interagency spats with the corps and his own engineers had left him a skeptic. He bought an inflatable rubber boat and stored it in the attic of his house near the 17th Street levee. When floodwaters rose, Harvey dragged down his boat and began rescuing neighbors. "Nobody wanted to go into a starvation mode and pay for real protection in the halls of Congress," he said afterward.

Since 2001, the Bush administration had repeatedly turned down requests from the levee board and the Louisiana delegation for more flood protection.

When Katrina struck, Orleans Avenue's levee walls held firm. But when Walter Baudier, the levee's original designer, drove out with another engineer to the canal weeks later, he was stunned to find a 200-foot gap between the levee wall and the pump station. The wall was left unfinished because of the government's refusal to fund the project, according to the corps and levee officials. The gap allowed floodwater to flow freely into the city.

Near the breach at 17th Street, an 18-foot section of levee wall ended up in Moskau's living room. Displaced to Idaho, Moskau returned weeks later to survey the damage. He hiked over hardened mud, gaping at the two-block-long rupture. Crowds of red-shirted corps engineers swarmed nearby, directing repairs. There were more engineers, he realized, than he had seen in the four years he had lived near the levee.

"The government was just like everybody who lived near the levee," Moskau said later. "They took those walls for granted."

(Adapted from a ©Los Angeles Times article.)

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Back to TEOCAWKI. I hadn't had a chance to buy my cowboy guns because, frankly, we didn't have the money. I'm not planning on going without them, however, so I'll 'borrow' some. I think maybe I have Sharon drive me down to Palmdale and try Santa Fe Gun Galleria first, I don't like them one bit. And since it's close, I'll try High Desert Storm. Sandy always has a Winchester in .45 Colt and either a Beretta Stampede or a Ruger Vaquero. Do you mind if I skip the horses and just get a pickup? There's this new fully loaded 2007 Dodge Ram 3500 Laramie Club cab 4WD with the 5.9 Liter Cummins diesel turbo diesel engine and an 8' box sitting on the lot at the Palmdale Auto Mall. I can do it before the radiation dies down the whole way. 1Rem per hour for 4 hours won't kill me. I'll take the KI anyway.

In order to 'borrow' the pickup, I needed about 10 gallons of diesel fuel. Sharon's car started so we didn't get any EMP. We filled her tank and the kid's tank and had 3 empty 5-gallon cans (we'd refilled them). I put the 3 empty cans and a can of gas in the car and drove myself down to a store where I borrowed a generator. I used that to pump 15 gallons of diesel and returned the generator. Then I went back and picked Sharon up. She let me drive and I made it to Palmdale in 75 minutes. We 'hit' Santa Fe Gun Galler-ia and grabbed some parkerized Remington 870s, the 4 Browning Hi-Powers they had

in the case, the M1A Scout Squad rifle, 2 Colt SAA .45 Colt Revolvers and 2 Winchesters. They didn't have much .45 Colt ammo.

Next stop was High Desert Storm and I tried to break as small a piece of glass as possible. The only thing I took was the .45 Colt ammo and I left Sandy a check. She got \$9.95 a box of 50 plus tax (don't you wish you lived in Palmdale). Finally, we went to the Auto Mall, found the pickup, got the number and found the keys. I added the 15-gallons of diesel, topped off Sharon's tank with gas and off we went.

About halfway to Ridgecrest, I realized that I shouldn't have returned the portable generator. I needed to top off the pickup's tank and refill the 3 cans. Only idiots slap themselves on the forehead, so I just cussed, "Crap."

I checked my dosimeter and I figured I had time to get the generator back, fill my tank and fill the cans. When we got to the turnoff for home, I led the way and emptied the other 7 cans into the big tank. Then I went back and got the generator, filled my tanks and the cans and headed home, with the generator. I'd probably glow in the dark.

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When I had the pickup tucked away in the garage, I went back to the basement. Once I was inside, I checked the dosimeter. ~8R, not fatal and I figured it would average out. I could have gotten 30R and had few effects. Since the very first story I ever wrote, I've claimed that when TSHTF, people would steal what they needed. Not everyone, but 2 kinds of people would steal, the criminal element would go after guns and TVs and the 'real' survivalists after necessities, like food and fuel if they were short or anticipated shortages. You saw what happened in New Orleans, was I close? The Three Amigos always went to Barstow just in case anything they could use was lying around.

New Orleans revealed that there were a whole lot of a third kind of people; they're the ones most of us call sheeple. It may be true that those school buses couldn't have evacuated all of them, but nobody even tried. I guess we'd better blame the Board of Education... Both the Mayor and Governor deny any blame.

When this was all over, I'm just as certain that Bush would deny any blame. After all, we didn't fire first. The Chinese attacked Taiwan and we just honored a Treaty that we had long claimed we wouldn't honor. The immediate defense against invasion by the PRC is, of course, the ROC's own armed forces. The current strategy is to hold-out against an invasion or blockade for as long as it would take until the US military could respond. A defense pact between the US and Japan signed in 2005 also implies that Japan would be involved in any response to a PRC invasion. In the event of an invasion, other US allies, especially Australia, would also likely be expected to respond.

For its part, the PRC has indicated that it finds a Republic of China far more acceptable than an independent Taiwan, and ironically, though it views the ROC as an illegitimate entity, it has stated that any effort on Taiwan to formally abolish the ROC or formally re-

nounce its claim over the Mainland would result in a strong and possibly military reaction, though given the likely defense of Taiwan by the US and Japan, it is not clear what the PRC reaction would in reality be. The US's current position is that the Taiwan issue must be resolved peacefully and that it condemns unilateral action, an unprovoked invasion by China or a declaration of formal independence by either side Taiwan.

## China Lake – Chapter 6

But George had a lot of practice waging wars and a new Treaty to uphold. Maybe that explains the movement of the boomers. Don't take my word for it, you can read about them moving on Global Security's website. I moved the carriers, but it was a lot of fun, just like playing Battleship. I suppose I could have sent them through the Med, the Suez Canal and into the Indian Ocean, but they got there quicker. And if we were going to fight the Chinese, we ought to have 7 carriers in the Pacific. It's  $\sim 1\frac{1}{2}$  times further (9,600) from Norfolk to Diego Garcia than it is from San Diego to Taiwan (6,300). Never mind the little sail from Norfolk to the Straits of Magellan (6,900). Slts 4,000 miles from Diego Garcia to Taiwan and only 6,300 miles to the Straits. 4,000+9,600=13,600 whereas 6,300+6,900=13,200. (That's line of sight statute mileage)

I reported in the previous chapter that there was uncertainty what the Chinese would do when the US and Japan intervened. Maybe the guy that wrote that believed it, I can't say. I had always expected China to try and save face the only way they could, by at-tacking America. More than once I've suggested the North Korea would attack Japan. 2 out of 2 ain't bad for a Tired Old Man. We weren't getting any news, but I knew it in my heart. North Korea probably attacked Japan and got a D-5 for their trouble. China probably got the other 95 with their 760 warheads. Half measures avail you nothing. Assuming we got all 400+ of China's weapons, we got the crap kicked out of us. THAAD wasn't up and running but we did have some of the PAC-3s working. China wouldn't expend all of their weapons; they had India, Pakistan and Russia to worry about too.

How bad could it be? The Pentagon recently predicted that the number of Chinese IC-BMs capable of hitting the United States "could increase to around 30 by 2005 and may reach up to 60 by 2010." At least, that's what the Bulletin of Atomic Scientists reported. Past predictions about China's nuclear arsenal have proven highly inaccurate and exaggerated. For example, in the 1960s, US Pacific Command estimated that China could have 435 nuclear weapons by 1973 – that's three times as many as China actually had. In 1984, the DIA set "the best estimate" for the projected number of Chinese nuclear warheads at 592 in 1989 and 818 in 1994 – approximately 50 and 100 percent above actual force levels for those years. The fact is that China's stockpile plateaued at approximately 400 warheads in the early 1980s.

Accurate predictions are difficult because of several unanswerable questions: Will China deploy more DF-31As than its currently deployed DF-5s (about 20)? Has China developed smaller and lighter warheads? Will China develop and deploy multiple reentry vehicles on its ICBMs? What countermeasures decisions might China take in response to a US missile defense system? Only time will answer those questions accurately.

The answer was obvious, strike before the system was deployed. Our government was only guessing. They had the number right, but were way off on the time line. In isn't in the nature of the US to have troops running around everywhere or to have PAC-3s sitting on the street corners in cities like LA. The 3 most probable targets in the US, IMHO, are Washington, New York and LA. The population of California is 10% of the popula-

tion of the US and half of them are in LA. On a workday, New York has the nation's highest concentrated population and Washington should be on everyone's list.

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Maybe when you start to age, all you're good for is sitting around and guessing what's going to happen next. I was guessing that the 7/10 rule applied to the radioactive decay. I bet I got that one right. We didn't have one of those remote sensing CD V-717s; all we had was a single CD V-715, 7 dosimeters, a charger, and 7 bottles of KI. The door to the shelter was re-locked and it would stay that way until we decided to leave. I saw that Twilight Zone episode about the bomb shelter. It wasn't going to happen to us. Huh, hell, pay attention, they do re-runs on TV. Those sheeple had teeth.

The following are the nine classic symptoms that a doctor looks for when considering a diagnosis of depression. A major depressive episode is present if five or more of the following nine symptoms are present during the same two-week period. At least one of the five symptoms must be either a depressed mood or loss of interest or pleasure: Depressed mood for most of the day, disturbed appetite or change in weight, disturbed sleep, psychomotor retardation or agitation, loss of interest in previously pleasurable activities, inability to enjoy usual hobbies or activities, fatigue or loss of energy, feelings of worthlessness; excessive and/or inappropriate guilt, difficulty concentrating or thinking clearly, and morbid or suicidal thoughts or actions. Sadness is sometimes replaced by irritability.

Zoloft is a SSRI (Selective Serotonin Reuptake Inhibitor). Its mechanism of action is to occupy the receptor sites keeping the serotonin in the synaptic gap. Britain outlawed Zoloft for persons under age 18. Because the antidepressant-suicide link is correlational, scientists do not know whether the increased suicide risk for people taking antidepressants occurs because the drugs make people suicidal, whether suicide occurs because the drugs un-depress the people enough to motivate the energy required to commit suicide (a popular theory), or because of a third, unknown factor. I only mention that because the press was having a field day back when with increased suicides in children taking antidepressants. That's some more of my junk knowledge. I can't remember what I had for breakfast because I was busy trying to keep the unimportant things sorted out.

Sharon and I had gone out a little early for some selective reallocation of resources. They had it and we didn't. We had 5 assault rifles and only 4 adults. Sharon took the M1A Scout Squad rifle and let the girls use the Mini-14s. The 3 ladies opted for the Browning Hi-Powers, giving me a pair of M1911s. I couldn't decide whether to be Wild Tom or a Minuteman, until Sharon pointed out that I had a Dodge, so I could be both. Provided, of course, I could line up a supply of diesel fuel for my pickup. Those 50 gallons I had only gave me a cruising range of about 750 miles. As long as I didn't blow a stop sign or speed, there was no reason to think that any cops would pull me over and want to see my non-existent driver's license. I was having bad dreams these days. Last night I dreamed that I was in Marine boot camp and I was about 21 years old. By age 21, I had a Master's degree in sarcasm. I dreamed I was dressed except for my shoes and I couldn't remember which bunk and footlocker was mine. Worse, our Platoon had a female DI. The only good news was that I wasn't a drunk.

It seems to me that after TEOCAWKI, a person has 2 choices, you can do whatever it takes to get by; or, you can lie down and die. I couldn't die now; I had my M1A rifle, finally, and a new Dodge Ram diesel. I'd stick around until the truck wore out, God willing. I wanted an auxiliary fuel tank and some kind of tank to hold extra diesel fuel. I remembered I'd written about the 98-gallon cross-bed diesel tank in some story and they were made somewhere in California (Chico). Whoever it was manufacturing them also installed them. Thing was, we were a bit short on money as in flat broke. This was going to call for a massive strategic reallocation.

Most of the stores were abandoned when we came out for good. I started gathering up things we would need, including the contents of those cash registers. Any way you look at it, that's just plain stealing, but it was more of a burglary than an armed robbery. I found a 300-gallon portable fuel trailer at a construction office and got it filled up with diesel, thanks to the portable generator. I sort of figured I needed help, so I fueled up and headed to Palmdale, trying to reconstitute the 3 amigos. I couldn't find Clarence and Linda said Ron had a heart attack and died. However, he left me something. Tell me, what am I going to do with a .375 H&H magnum rifle, hunt elephants?

I told Linda she could come to Ridgecrest, but she said she was staying in Palmdale and keeping her remaining family together. She had no idea what happened to Clarence. Next stop was High Desert Storm and Sandy was open. I walked in, and she extended her palm. I peeked and the broken window was replaced. I told her Ron had died and left me the .375 H&H. She set 5 boxes (100 rounds) of ammo on the counter and added everything up. The window was \$200 and the ammo was \$40 a box. I paid in cash. Then, she produced my check and I had to redeem it, in cash. It appeared that I have to burgle more businesses.

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I sort of worked my way back to Ridgecrest, stopping in Rosamond and Mojave to 'shop'. By this time, I'd picked up a pry bar to make opening the cash registers easier. You might ask yourself why there was cash in cash registers in the first place, I did. I didn't know why, maybe the people had just boogied when the warning was issued. When it's the end of the world; who cares about the cash in the register? Some did, the register drawers were open and empty. I didn't try to blow any safes; I'd seen *Butch Cassidy and the Sundance Kid*. Besides, I didn't have any dynamite. These folks were out whatever money was in the cash registers and any Kool's they had on the shelf.

I found the story, several in fact. Our 30, 50, and 98-gallon cross-the-bed fuel tank systems operate with Transfer Flow's Trax-II. Trax-II is a computer controlled operating

system that includes a dash mounted LCD. The LCD displays the gallons in the main tank, the auxiliary tank, the combined gallonage, and the operational status of the fuel systems. Because the transferring of fuel is automatic, there's no need for a toggle switch to flip between fuel tanks. Our cross-the-bed fuel tanks are made from aluminum diamond plate or 14 gauge-aluminized steel, which is powder coated black. They come with all parts and components needed for a legal hookup. \$1,337.03, not installed.

Hmm, all the parts and components needed for a legal hookup... 1444 Fortress St., Chico, CA. Oops, I was thinking Chino, not Chico. Chico was on US 99 between Sacramento and Red Bluff. That was way too far to go for a fuel tank, close to 500 miles. I did drive up to see the volcano, but you couldn't see anything from the road.

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I should have stopped at Costco or Sam's Club when I was down in the AV. But, I was alone and only Sharon and the girls knew what we needed. I knew of 3 things, beans, rice and Kool's. I had enough Kool's to last for a year or two, 75 cartons. Well, call it 75 weeks. If we were going back to the AV and check out Costco, it wouldn't be during business hours, they limited you to 2 cartons of cigarettes and then had the audacity to expect you to pay. For all I know, cigarettes might become the new currency.

I had any available cash that I found lying around and I wasn't about to try and hit a bank. I figured the best bet was to do a little of the moonlight shopping. We'd better do that soon, before others got the same idea and they improved security at the stores. We needed something to haul our pickings in and I hooked up to a U-Haul 5'x9' ramp trailer. I liked it because: 1) it was the biggest one on the lot; and, 2) the ramp made loading easier.

I'm sitting here thinking if they quit growing chickens and pork steak, Sharon would starve to death and she asks if she should put chicken and pork steak on her shopping list. I didn't even know if Sam's Club or Costco had any meat, I was thinking more of getting canned goods. I tried giving her little hints, like only taking ½ a chicken breast and a piece of pork steak that was about a tablespoon in size. I mentioned ground beef and round steak, but she said we had plenty. Yeah right, we had plenty because she never cooked it.

Amy had gotten her started on Rice-a-Roni and things had gone slightly downhill thereafter. I'm a beef and potatoes fan. They liked pork steak, chops, chicken and that rice-aroni crap. Sharon purely hated fried round steak, tenderized or not. She got a pained look on her face when I told her what I liked. If she didn't want to know, why did she bother asking? Her idea of chili was soup. Now do you understand? If it were a marriage made in Heaven, well... never mind.

So in the dark of night, we loaded the magazines and took off for the Antelope Valley to raid and plunder. I never ran a forklift truck before and they kept their extra stock up on top of the racks. I could get into the cigarette cage if I could get into the store in the first

place. Costco had a pharmacy and we could load up on our prescriptions, if we could get into the store in the first place.

Were it I doing the picking, I'd have gotten cigarettes, beans, rice, coffee, flour, sugar and things I thought would help us over the long run: pet food, litter, toilet paper and essentials like bacon and canned hams. 2 or 3 boxes of Bic lighters and important things like feminine hygiene supplies for the girls. 8 of those 50# bags of beans would make a lot of chili and we'd have an excuse to use the frozen ground beef. I should see about getting a new generator if Costco had one.

Guess what I found? An Onan RS15000 Propane generator with a mounted 200amp ATS they had as a demo in the store, darn, it was heavy (857+48=905). They wanted \$7,999.99 plus tax. I'd owe them. We agreed that Sharon could fill the pickup and I'd fill the trailer. Guess what, the forklifts aren't that hard to drive. What I'd need now was a propane tank and propane. I had the 10 bottles, but I didn't figure they'd last long. No problem: AmeriGas, 1345 W Inyokern Rd, Ridgecrest, CA. I was perfectly willing to owe them too.

The way I'd been able to write about the Onan generators in my stories was by downloading the pdf files to my computer. Then, I written about them in my stories so I had all the reference material I needed. The trailer had the generator, beans, you know the rest of the list and the pickup had what the girls wanted. One of them was thinking, we had enough feminine hygiene supplies for a good long time. I had a little room left on the trailer so I treated myself to a new computer and a HP copier/printer with plenty of inkjet cartridges and paper. It's good for Costco that they didn't sell weapons or ammo!

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Does that explain how you survive when you don't have any money? If it makes you feel better, you can call it strategic reallocation. The government won't.

How do you get a 905# generator and transfer switch down the stairs and into the basement? My solution was to remove the sandbags from the outside stair entrance and use plywood to put in a ramp over the stairs. I backed the trailer up to the stairs and lowered the trailer ramp and got the generator right to the edge. Then I lowered it with a block and tackle down the ramp into the basement. Not bad for and old fart!

I had a piece of upside down carpet on the ramp and the generator slid right onto it. When we got the generator to the basement, the 4 of us slid it into the generator room. The nice thing about Lorrie is she listens and the nice thing about Amy is that she drives. So we went to AmeriGas and loaded up a delivery truck and 2 1,000-gallon tanks. They had about 6 of the tanks sitting around so we made enough trips to get them all plus enough of the cradles to hold them. It was near dark by the time we had the 6 tanks all lined up and filled. Tomorrow, I'd get hose and plumb them together, right after we got home from Sam's Club in Palmdale. Meanwhile, I'd run the new generator on the bottles. Man, I was tired. We'd gone shopping last night in Palmdale at Costco, spent the day borrowing propane tanks and propane and now we were going to Sam's Club. I guess I can sleep when I die. I wanted more smokes and toilet paper and all the white beans I could find. I was also going for pasta and pasta sauce. There wasn't any danger the girls would get things I like to eat. But, I'd been nice; I got Newport's for Amy. When we got home from Sam's Club, I went to bed. I needed sleep if I was going to be a plumber.

I sort of anticipated that the generator would use about 1.6 gallons per hour at 50% power because that's what the brochure on my old computer said. I'd hooked the generator up to the electrical panel with the gasoline generator shut down. I didn't much care for hot circuits. AmeriGas had enough hose and I'd gotten all that I would need. We had 5,400-gallons of propane in the tanks and 2,700-gallons on the delivery truck I'd kept. 8,100-gallons would run the generator for about 5,000 hours. We needed oil and filters to keep the generator going. The book said to change the oil every 200 hours.

Between the crap the girls got from Costco and Sam's Club and the real food I got, we'd have enough to eat for a while. Costco would have been better off if they'd have taken that demo generator for their meat storage, but the meat was probably spoiled by the time anyone had thought of it. Not my fault, but it did save me from needing to unhook the generator.

After I got the generator all plumbed in with the high-pressure hoses, and we went shopping for oil and filters there in Ridgecrest, we were good to go for quite a while. I was close enough to being out of gas that I could pump the gas out of the gas tank and use it for diesel, solving a serious problem. The thing was I had to find somewhere to store the 800-gallons of gas we had left. Lorrie suggested we get 2 of the 500-gallon propane tanks from AmeriGas and pump the gasoline into the 2 tanks. Then, we could use the 300-gallon trailer to fill the gasoline tank with diesel, 300 gallons at a time. I could probably scout around some and find some kind of fuel tank I could mount in the bed of the Dodge. Or, I guess I could just put 7 of the 5-gallon cans in the back in some sort of a rack to hold them in place. That would give me a full refill of the tank. And 70 gallons of diesel would increase my total range to over 1,000 miles. It was a shame I didn't have anyone to ride to Chico with me, I come up with about \$2,000 in cash.

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"So, where is this Chico place?"

"Same place it's always been, north of Sacramento. Why do you want to ride with me dear?"

"Do you think you could find anyone to install the cross bed tank?"

"If I can't, I may be able to find the tank anyway. I have enough cash to pay for one and the installation. Once we get the fuel all transferred, do you want to ride along? We

could pull the 300-gallons of diesel behind the truck to refill the tank and fill the new tank if I can get it."

"Well, you did solve the problem with electricity and selling the neighbor the old gas generator got him to agree to keep an eye on the girls."

"Giving him 500-gallons of gas didn't hurt either. That will keep him in lights for about 3 months."

"Why don't you just ask Ralph to ride along? We can give Jean the M1A Scout rifle and you can give Ralph my M1A to use on the trip."

"Fine, but what are you going to use?"

"I have 2 Winchester rifles in .45 Colt and the girls have the Mini-14s and Browning's."

"I guess Ralph sort of got over hating guns."

"Yeah, when you shot those two guys who tried to break into his place."

"Do you think 10 shots apiece were enough?"

"They're dead, aren't they?"

"You'll let Ralph use your M1911?"

"I don't like it anyway. Sell him the M1As and the M1911. I'll settle for the cowboy guns."

It seems that Ralph had plenty of cash and even some gold coins. I sold him the M1A, the M1A Scout, and the M1911 plus magazines and ammo for 6 of those gold Eagles. We were both tickled pink. He agreed to ride to Chico with me and asked if he could ride shotgun. I asked did he have a shotgun and he said no. I sold him that darned Mossberg for a quarter ounce coin and the 12-pellet for another quarter ounce coin. We had plenty of the 870s after our visit to the Santa Fe Gun Galleria and I wanted to find some tactical buckshot and slugs for Sharon to shoot. Ralph needed more of the magazines for the 2 M1As because I only included 10, 5 per gun. This might be an auspicious time to go to Reno, by the time we were in Sacramento on the way home, we'd be pretty close to Reno and I had 6½ ounces of gold now. I wouldn't mind getting Sharon an AR15 and 20 magazines plus another 10 magazines for my M1A. They might have some cheaper elephant ammo too. I only had the 40 rounds Ron had left me and the 100 rounds I bought from Sandy.

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Ralph and I discovered that the Chinese had only fired 30 weapons on the US and our PAC-3s had intercepted 6 of those meaning that we'd only been hit with 24 weapons.

The same rumor mill that generated that little bit of information also claimed that we'd emptied 4 of the SSBNs on China and North Korea. I don't think we'll be importing anymore Kia's. The man claimed that South Korea got hit too, but he didn't know by whom.

I half figured I'd get a 98-gallon tank for free. No such luck, I'm sorry to say. The attack on the US wasn't as bad as Ralph and I thought, although it was bad enough, and guess who was open for business. That ate up most of the \$2,000 I borrowed from the cash registers, but the installation was cheaper than I thought it might be. The firm was hurting for business. Once we got the tank installed and all fueled up, we headed to Rocklin where we picked up I-80 and headed to Reno.

I expected we'd have to shoot our way into Reno, but it was pretty much business as usual, at least for certain professions. We left the rifles in the pickup and waded into the gun store armed with our M1911s. It was only fair; everyone in the store was armed to the teeth. I got an AR15 and 20 magazines plus 10 more for my M1A. Something had changed, they didn't even ask for ID. They had a bunch of the 5.56×45mm Lake City M855 ammo in the stripper clips in bandoleers and they had Ammoman beat on price by about \$50 a case. I spent 2 of the gold coins and I was ready for WW IV and maybe WW V. That included a new ALICE setup for Sharon. Ralph paid cash and held on to his gold. We finished up in Reno and headed back to Ridgecrest.

"Here you go, dear, I got you a nice AR15."

"Full auto?"

"No. Derek said to only load 27 rounds in the magazines to protect the springs."

"Where did you get that?"

"Reno."

"Check out the girls?"

"Nothing wrong with my eyes. Nobody I'd bring home to meet my mother."

"How much ammo did you buy?"

"I only spent 2 gold Eagles in Reno. I think maybe gold has gone up in value. I got 6 crates of .223. That's 10,080-rounds on stripper clips in bandoleers in ammo cans, 2 cans per crate. I got 20 magazines for your AR15 and 10 more for my M1A."

"What's it like out there?"

Ralph and I talked to some guy who said the US only got hit with 24 warheads. Apparently, we retaliated with 768 warheads." "Who won?"

"I'm not sure, but I'd guess that China and North Korea lost. Someone hit south Korea."

"What about Japan?"

"I didn't hear. But my thinking is that North Korea probably attacked them."

"Do we have any money left?"

"Some. Plus I have 41/2 ounces of gold. What do we need?"

"Fabric. I thought I'd make Ralph and Jean a quilt for their bed."

"Here's the rest of the cash. Don't spend it all in one place."

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Eventually, the electricity came back on followed by the phones. I was going nuts downloading stuff to my new computer. Yes, the TV was back on. The strikes were against several military installations and the 10 largest cities with some of the cities getting 2 nukes. Don't plan on going to Central Park in New York City anytime soon – it's radioactive. LA was so spread out that it got 3 nukes. I hope that solved the gang problem. Nothing in the Bay area got hit; I guess they must have run out of weapons. What a shame.

We had been without electricity for about 2 months, not bad when you think about it. I emptied the delivery truck into my propane tanks and bottles and parked it back at AmeriGas. I didn't leave a note. If I had known that Sandy Storm would make me pay for the broken window, I wouldn't have left her a note either. Interestingly, we didn't see anything of FEMA. Ridgecrest had gotten a minor dose of radiation but no damage. My M1A was barely broken in and the trouble was over.

It seems that someone had done a string of burglaries in Ridgecrest before the cops came out from their shelter. They didn't have a clue, they claimed whoever it was wore latex gloves. I'd long since disposed of the pry bar; I'd seen something on TV about tool marks. Not latex, nitrile, but I won't tell them if you don't. We buried the propane tanks before we filled them, they'd stick out like a sore thumb. I cashed one of the gold coins and ordered a CD V-717 and more bottles of KIO<sub>3</sub> plus a pair of dosimeters for Ralph and Jean.

Ralph had worked at the NAWS before they locked the place down. He had 30 years in counting his service time and retired. We were both getting our pensions now that the banks were up and running and we had quite a bit built up in the lowa account, 2 quarters worth. Sharon had around \$2,000 in her savings account so if she needed more fabric for the quilt she could spend her money.

With the restoration of law and order, the cops – not the TV show, we had to put our weapons up lest we get arrested for having California illegal arms. If you go to the NRA Facts sheets and read about California Guns laws, it's enough to make you sick. About the only thing you could legally do was open carry a single action revolver on your property.

We found out where FEMA was, LA and San Diego, tiptoeing around in radiation suits trying to find survivors. One of the things that got the US into WW II was stationing the Pacific Fleet at Pearl Harbor. With San Diego gone, some homeports were shifted to Washington and others to Pearl. They kept the 9 boomers and 2 extra carriers in the Pacific. The Bush would go to the Atlantic Fleet and the Kitty Hawk would retire increasing the Atlantic Fleet and reducing the Pacific fleet. After that, as new carriers came online, the Enterprise and the Kennedy would be retired. The US would then have 10 Nimitz-class carriers and 2 of the newer CVN-21-class carriers. The Bush was about half Nimitz and half CVN-21 because they were testing new gadgets. They were building the Bush at Newport News. The Bush was launched in 2006 and no doubt delivery would be accelerated now that we had trouble with China. The government probably wanted to get those 2 new CVN-21s built ahead of schedule.

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We were more or less waiting for the final shoe to drop. Ralph and I agreed that it wasn't likely anyone would attack the US again like China had, not with a response of 768 warheads against 30 warheads. That was a response of 25.6 to 1. It was good for our economy; we had to build 96 replacement missiles and 768 replacement warheads. Because the Chinese had elected to only hit 10 cities, albeit with multiple warheads, the word was that they would be doing the cleanup in radiation suits with bulldozers. Parts of LA had survived; it was now 'ollywoo'. It's a shame that Oliver Hardy is dead; he'd have loved that. There was a military presence in San Diego and LA according to rumors and they were shooting anyone armed on sight. Most of legitimate news we get is on the ham radio. The mainstream media is noticeably back but their news seems limited to local news. I almost miss the crap they used to report.

## China Lake – Chapter 7

Almost miss. Even Geraldo was ok for a while back in 2005, but he soon returned to his old ways. We needed a breather before whatever was coming next came. I pretty sure if we hadn't needed the break, we'd have gotten it. I was reminded of the TV ad that said something about the greatest thing the Devil ever did was making people not recognize him, or something in the general vein. As I understood it, the Devil was given the earth to govern. Typical politician, he got it all wrong. Oh, he'd generated a bunch of atheists, and even more agnostics, but the people who believed in God in one form or another were definitely in charge. In my opinion he was making inroads with the Muslims, they had a lot of bad apples these days. That was probably just my religious prejudice.

If that generator used 1.6gph and there were 8,766 hours in the average year, we needed more than 5,400-gallons of propane. 14,000 would be much better. If 14,000-gallons was the net tank capacity, that meant a total tank capacity of closer to 16,000-gallons. Tanks cost around \$1 a gallon, used, and we were 10,000s-gallons short. Wish in one hand and s... Those bad dreams continued only this was a bad dream with a twist. I dreamed that Tony was run over by a car and killed. And, I realized that I didn't mention the elephant ammo, I got another 100 rounds.

I loved to use the tick, tick, tick bit when I wrote. The clock was ticking down; we just had no idea what would be next. As much as I wanted more tanks of propane, it wasn't going to happen. With the worst over, maybe we wouldn't need them. It was thinking like that that got people killed. I let each of the girls take a Browning Hi Power and 5 magazines of ammo, cautioning both that the guns were hot. Lorrie and Amy were living together in Lancaster. Between Amy's wages and Lorrie's SSI, plus Lorrie doing the baby-sitting, things worked out well.

Sharon stocked their pantry, again, and pointed out that the place they lived in had a basement where the laundry room and storage rooms were located. The girls could empty the storage room and shelter there the next time. That was Sharon's idea – with my full endorsement. We spent half the money in the bank restocking groceries after the kids left.

Two things we didn't need were beans or rice – we had plenty. I wasn't particularly short on smokes either. But the freezer was low and both of our favorite stores had their meat cases well stocked. When you buy meat these days, you can get the better part of a \$1,000 in a single grocery cart. We rationalized that we could avoid a trip until it was time to visit Dr. J again. Wait, Northridge was gone, where was my doctor? I decided to go to the doctor in Lancaster who found my ulcers. You only go to a doctor to find out what you're doing wrong and get refills for your prescriptions.

Post-traumatic stress disorder (PTSD) is a term for the psychological consequences of exposure to, or confrontation with, stressful experiences which involve actual or threatened death, serious physical injury, or a threat to physical and/or psychological integrity, and which the person experienced as highly traumatic. It is occasionally called posttraumatic stress reaction, to emphasize that it is a routine result of a traumatic experience, rather than a manifestation of a pre-existing psychological weakness on the part of the patient.

Symptoms can include re-experiencing phenomena, such as nightmares and flashbacks, emotional detachment or numbing of feelings (emotional self-mortification) combined with regular hyperarousal and possibly sleep abnormalities (insomnia), avoidance of reminders and extreme distress when exposed to the reminders ("triggers"), with irritability and excessive startle.

Most of us learned the term PTSD after Vietnam, but it had been around as long as there had been people and traumatic events, e.g., forever. After a few of the vets from 'Nam experienced severe flashbacks, it came to the public attention and all of a sudden every time anything exciting happened, e.g., at a school, they brought in counselors. George Patton had a solution, slap the guy around a little and call him a coward, but Patton was right, most of the time.

We have a group of people in our society that are faced with stressful situations most every day. They even have a name – they're called cops. Jack Webb once asked in a Dragnet episode if a trained armed policeman wasn't safe, what chance did the public have. The people in Sacramento that passed the California gun laws must have missed that episode. The event that started the downward spiral in California was the Stockton School Shooting. On January 27, 1989, 25-year-old Patrick Purdy fired an AK-47 at random at Cleveland Elementary School, killing five children (aged between 6 and 9) and wounding 29 others and one teacher, before taking his own life. The incident inspired a rash of legislation restricting the purchase of assault weapons. That wasn't the first California school shooting and it wasn't the last. The guns laws did nothing to stop school shootings.

BTW, the North Hollywood Shootout took place in 1997. Those guys were armed with: 3 AKM assault rifles, a HK G3A4 battle rifle, a M16A1 assault rifle with a 100 round beta C-mag and a Beretta 92FS pistol; all illegal in California except for the pistol. Their illegal rifles were illegally modified to full auto. Apparently, only the good guys obey the law. What did that make us?

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WASHINGTON – Before the next big hurricane's winds howl ashore, Homeland Security officials want an emergency communications network operating, emergency medical facilities treating patients, and teams dispatched to search for victims at the likely ground zero. In the wake of congressional hearings that exposed the breathtaking failures of the federal response to Hurricane Katrina, the Bush administration is retooling its disaster plan to react more quickly to the next catastrophe. US military communications with Louisiana and Mississippi officials were so poor that commanders were forced to use couriers to transmit messages, said Paul McHale, the assistant defense secretary for homeland defense.

FEMA's "Red October" mobile command center rode out the storm at Barksdale Air Force Base near Shreveport, LA, six hours from New Orleans. The oversize trailer can establish communications in a stricken area and serve as the nerve center for directing emergency relief. But it did not arrive in the city until several days after Katrina had struck. Bagnal said the administration wants to replace the "clunky" FEMA vehicles with smaller ones that could be kept nearby and either driven or flown to where they are needed. I knew that all the time, it was the equipment, not the people. MREs, bags of ice and bottles of water are way too complicated.

LA was easier than New Orleans all they needed was dozers, nobody was left alive to sue. Some survived, the cockroaches and a few people, but Orange County, downtown and the Valley were mostly gone. I guess it must have been the multiple strikes. It was nice in Ridgecrest; I put one of those RSS readers on my new computer and hooked into one of the Reuters news channels. I told you Ralph and I knew something was coming, but we didn't know what.

That's not totally true; we didn't expect to be nuked again. Not after the International papers printed aerial photographs of what was left of China and North Korea. Our military must have thought those missiles wouldn't work, they used way too many. The military was wrong. They worked just fine and all 8 warheads from one missile were targeted on Beijing. Didn't they used to have something called the Forbidden City and a place called Tian'anmen Square? I'm sure someone still has pictures of the places, try Wiki.

"What do you think, Tom, earthquake?"

"Ralph, we can use elimination. We already have a volcano and we won't get a hurricane. California only gets a few tornadoes, ranging from F0 to F2. Kern County only had 11 tornadoes during the 20th Century and all of those were F0s except for 2 F1s."

"Tsunami?"

"That's possible because of Cascadia but we're too far from the water for that to be a problem. I doubt a tsunami would reach this far south."

"Let's list the natural hazards: Floods, tornadoes, hurricanes, thunderstorms and lightning, winter storms and extreme cold, extreme heat, earthquakes, volcanoes, landslides, tsunamis and wildfires. Did I miss any?"

"None that I can think of Ralph."

"Ok then, the next category is technological hazards: hazardous materials, household chemicals and nuclear power plants. Right?"

"I suppose."

"Fine. Then we have terrorist threats and that can include: explosions, biological, chemical or nuclear threats and dirty bombs."

"Anything else?"

"Other than another war? Not that I can think of."

"I suppose you'd include a Mexican invasion as a war?"

"Nah, business as usual. Someone has to do the hard work."

"You forgot an asteroid or meteor impact."

"Pretty remote, Tom."

"It's still a possibility."

"Ok, I'll add impact to the natural hazards list. It's BS if you ask me."

"So is us having our own volcano, Ralph."

"You just had to include a nuclear war."

"I didn't attack China and if I could do it, I'd take my vote for George back."

"What do you have against George?"

"The occupation of Iraq; we had 2,379 fatalities as of 1/1/06. We should have nuked that SOB and been done with it. Look at what happened when they sentenced him to hang."

"They only did that to keep the Sunnis from revolting."

"Well, although penalties were at the discretion of the Tribunal, the death penalty was imposed by the Iraqi Interim Government, which led to some degree of international isolation of the court, with most of the support coming from the US. However the Judges were being supported and trained by other coalition nations as well, and there were high hopes that more international involvement would be forthcoming. The shooting of one of the investigative judges was a hindrance on the court's progress. I guess the Europeans had their way."

"Is that what's behind the civil war they're having?"

"Nah, it's a religious war. Iraq is 65-35 Shia to Sunni."

Funny how that works; you start talking about the next disaster and end up discussing a previous disaster. Ralph and I didn't reach any conclusion of what the next disaster might be. We eliminated nuclear war, all of the natural hazards except earthquakes and thunderstorms and technological hazards except for reactor hazards. Terrorist threats were always there and neither of us gave any thought to a pandemic. The US was still operating on borrowed money and that could also lead to problems. Unless something happened to finish off the remaining infrastructure, we'd be ok. Or, so we thought.

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There had been illness among the survivors of the cities the Chinese hit, but it was reported. CDC got the military to quarantine large areas and slowly, but surely, they solved the problems. Most of it related to a poor supply of potable water. Ralph and I were beginning to believe that we'd gone overboard on preparing for whatever lay ahead. I can tell you Sharon thought so and every time I strapped on the SAA, she got upset.

I also had a pickup without a license plate for a while. Then I found a wrecked Dodge Ram the right description and 'borrowed' the plates. In the great state of California, a substantial portion of the drivers aren't licensed and don't have insurance. Yeah, me too and it was worse now after the war. I'd taped a piece of paper in the window for a while, but eventually found that set of plates. I thought I was clever getting a registration, I'd taken the registration out of the glove box of the wrecked truck, dummied up a bill of sale and Sharon went and transferred title. They never check the VIN numbers. And, if they do, they usually just check the one in the window. Ralph had managed to get the one from the wreck and he installed it for me.

Ralph and I were thicker than thieves these days. With my sponsor's death of a heart attack and Clarence MIA, I got myself a new partner. It would have been better if his name was Dick or Harry, but we got by. I hadn't heard from Derek in a long time and Damon was working on a new story. He used the handle Raider Nation and he had a grizz in his sig that took up half a page. Bigger isn't always better.

Ralph and I decided that our only option was to remain in a state of preparedness and sit back and wait for it to happen. That's one place people start to go wrong. They get a splurge of energy and get ready, but then whatever it was they were expecting doesn't happen and their preparations go out the window. They need a new battery and pulled one from their supplies and then forget to replace it. The budget gets a little tight and they use some of their reserve foods and don't remember to replace them. Like Jerry said in his short story, they allow themselves to become unprepared.

One thing I hadn't figured out was how I was going to get my propane tanks filled. AmeriGas was missing 6 of the 1,000-gallon tanks and they might consider my having 6 tanks too much of a coincidence. Especially considering that I used to use bottle gas. Sharon suggested I get a different supplier. I decided to buy from AmeriGas because if I bought enough, over time I'd be paying them back. I had Sharon call them and told her to tell them the tanks were there when we moved in. She hates to lie, let me tell you.

She and I worked out a compromise, we'd rent one new 1000-gallon tank from Ameri-Gas and have the others topped off. We hadn't used much, but the generator exercised itself and I just wanted to be full up. This put us up to 7 tanks or 6,300-gallons. Ralph helped and we plumbed the new tank into the manifold and from now on the generator would run off the new tank (remote values to shut off the individual tanks). As a matter of fact, everything was full up and I even got 3 cords of firewood for the fireplace.

I managed to transfer the files from my old computer to my new computer using a null modem. A null modem cable is an RS-232 serial cable where the transmit and receive lines are cross-linked. In some cables there are also handshake lines cross-linked. In many situations a straight through serial cable is used, together with a null modem adapter. The adapter contains the necessary crosslinks between the signals. Under the MS Windows operating system, the direct cable connection can be used over a null modem connection. Null modems aren't used very often now.

"What do we need from Costco?"

"Did you make up a grocery list?"

"Yes, dear. I..."

"It was a yes or no question. We need new batteries, D, C, AA, AAA and 9-volt. I need inkjet cartridges for the new printer and a case of paper. You'd better get me 2 color and 4 black. Do you want me to drive?"

I actually had my own list that included what I'd mentioned, motor oil for the generator, filters, and one of those dyn-o-mite Miami vice holster rigs like Sonny Crockett wore. The only problem was that Amy and Lorrie each had a 9mm, Sharon one and Jean the 4th. Maybe I'd stop by the Santa Fe Gun Galleria. I wanted 3 of the Mec-Gar made flush-fitting 15-round magazines too. Galco was in Phoenix and nobody answered the phone. Oops, Phoenix was #6 on the list. Screw it; I didn't like a shoulder holster all that much anyway (sour grapes). Better I should get an in the waistband holster and wear the BHP in the small of my back. And, as long as I was buying Mec-Gar magazines, I might just as well get 5.

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That 15-day waiting period was a real pain in the behind. And, of course, the BHP had a California legal 10-round magazine. Plus, the older and more worn out I got, the less I wanted to lug around the M1A rifle. SFGG had a Mini-14 and I bought that too. Ralph and I had to make a trip to Reno or Lost Wages.

"Hey Ralph, you want to go check out the hookers?"

"Say what?"

"I have to make a trip to Nevada to pick up a Butler Creek folding stock, a flashhider, some 30-round PMI magazines and 5 Mec-Gar 15-round magazines for my new Browning,"

"What does that have to do with hookers?"

"Looking is free."

"Sure, when do you want to go?"

"Tomorrow. We'll make it a one-day trip. Before we went to Costco yesterday, we stopped by the SFGG in Palmdale and I bought a Mini-14 and another Hi-Power."

"What are you going to use for ammo?"

"Speer Gold Dot Service/Defense 9mm Luger +P 124-grain GDHP at 1220fps and 410ftpd."

"Is that a hot load?"

"Flying ash cans."

"What time tomorrow?"

"7am."

I drove and we made it by 11:30am. It took about 2 hours in Vegas to find the things I wanted and Ralph and I turned around and headed home. On the way back, he brought up the Long Valley Caldera. I had been out on the net doing more research on the thing because of our new volcano. The magma chamber under the central part of the caldera (the resurgent dome) has produced just three eruption sequences over the past 600,000 years. These moderately large, explosive eruptions occurred some 500,000, 300,000, and 100,000 years ago (the most recent of these eruptions produced the Mammoth Knolls volcanic domes located just north of Mammoth Lakes). The interval between these eruptions is roughly 200,000 years, and thus the long-term odds of another eruption from the central magma chamber from the Long Valley magma chamber are roughly one in 200,000 in any given year.

"So we're not due for 100,000-years?"

"I don't know. Long Valley went up 760,000 years ago with a 580km<sup>3</sup> eruption. They've gotten smaller eruptions every 750 years or so. There was some mention of an increase in height of the Resurgent Dome."

"We should get plenty of warning. When Mt. St. Helen's went in 1980, that dome grew quite a bit."

"It could be the Caldera, Ralph. If we have volcanic activity in this area, they must have something going on up there. Say did you ever see that TV show *Supervolcano*?"

"The one where Yellowstone opened up vents all the way around the rim of the caldera? Yeah, I watched it a couple of times, Tom."

"What if something like that happened at Long Valley? According to the TV show, the Supervolcano put out 6,000mi<sup>3</sup> of debris, more than 10 times the volume of the Huckleberry Ridge eruption 2.1 million years ago."

"The thing about that show that really surprised me was that they didn't have more warning."

"The thing about the show that didn't surprise me, Ralph, was the reactions of the politicians. It wasn't politically convenient to have a *Supervolcano*, so they denied it was possible. They had about the same attitudes as Ray Nagin and Kathleen Blanco and all those folks responsible for blocking the improvements to the levee system around New Orleans. Then they paraded that geologist, Rick Lieberman, up on the stage and implied by his presence that they weren't lying. God, I hate politicians."

"The guy in charge of Yellowstone that Brokaw interviewed seemed to dismiss the idea of another *Supervolcano*."

"Of course, they need tourists. What would you expect him to say, Ralph? There were many things he could have said that he didn't mention, like that bulge in the lake."

"So what would happen if Long Valley let loose with say 5 times the big eruption?"

"That would yield 725mi<sup>3</sup> of debris, larger than Huckleberry but smaller that the *Super-volcano* on the show. And 10 times larger would be about 1,450mi<sup>3</sup>.

"What's that in kilometers?"

"5,800km<sup>3</sup>."

"Sheesh, if that happened, we'd be up to our butts in ash."

"Never say never."

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Was that it? Was one of the calderas going to erupt? Long Valley wasn't due for 100,000 years and Yellowstone was 40,000 years overdue. Long Valley had put out 580km<sup>3</sup> 760,000 years ago and Yellowstone varied from 2,450km<sup>3</sup> down to 280km<sup>3</sup>, with the last major eruption being 1,000km<sup>3</sup>. Our getting a new volcano up on the NAWC did seem to indicate that there was some major geologic activity underway. Because Long Valley was on the eastern side of the mountains, most of the ash was deflected away from California. Conversely, Yellowstone's first big blow covered half of California. If you look closely at the maps, Ridgecrest was covered up 3 times. The only eruption that didn't cover Ridgecrest was Mesa Falls.

It would be my luck a rock about 10 miles across would slam into central California. The rock that slammed into Yucatán 65 million years ago was only 6-miles across (Chicxulub impact). In recent years, several other craters of around the same age as Chicxulub have been discovered, all between latitudes 20°N and 70°N. Examples include the Silverpit crater in the UK and the Boltysh crater in Ukraine, both much smaller than Chicxulub but likely to have been caused by objects many tens of meters across striking the earth. This has led to the hypothesis that the Chicxulub impact may have been only one of several impacts that happened all at the same time. Another crater thought to have been formed at the same time was the Shiva crater. One theory is that the impacts 65 million years ago were similar to Shoemaker-Levy 9, which broke up before it impacted Jupiter.

The list of hazards that Ralph came up with came from a FEMA handbook titled *Are You Ready.* You can download the entire book from the FEMA website. It's about 21mb and 204 pages of semi-useful information, *semi* because FEMA underestimates everything. I try to keep my hand in. I had part of the book when it first came out, but now the entire publication was available to download. They weren't worried about impacts. They weren't all THAT worried about New Orleans. They're more worried about terrorists.

Somehow I think that one of the calderas erupting or a rock hitting the planet would be totally terrifying. I've even projected that terrorists could somehow cause one of the calderas to erupt. I don't believe it, that's a reach, but never say never. Maybe James Bond could shoot it with his 7.65×17mm (.32 auto) Walther PPK and cause an eruption. He switched to the Walther P99 in 1997's *Tomorrow Never Dies*. I think it's ugly. Hey, everyone needs a hero and I like the guy who gets all the girls. When I was younger, I knew what to do with them when I got one, which I didn't. I hate diabetes; I still know WHAT to do.

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I follow the writing model that starts out before the event because I believe the key to survival is in being prepared. It seems that I frequently run across something I hadn't noted in a previous story and then I have to come up with another to share the new information. In this story, we have a small volcanic eruption near Coso Junction that didn't amount to much and then those Chinese attacked. I hope they never attack, but the sooner the better because ATM, they can't put many weapons on the US. If the atomic

scientists are right, they aren't increasing their nukes, but are switching them from bombs to warheads, shame on them. If we never have a nuclear war, that will be too soon.

I presume you noticed that every time something happened, Sharon and I improved our preparations. That's because of the rule of three's. I hope everyone got his or her Folgers coffee bought before the price went up after Katrina. Was I right (yes)? I ignore the times I am wrong and only report when I'm right.

BTW, Mary says Derek called December 31st and aside from working 18 hours a day (!), 7 days a week (?), he's fine. I not writing him anymore, he never answers and then I worry. He has his behind in a sling because, "He is just too nice sometimes. He does need to be a friend to the guys but they take him like that and not like a Sergeant in Charge. I told him it was good that he is getting them. (???) I love him but hey he is just too nice sometimes." She told him to write me, but I won't hold my breath, it sounds like he needs the sleep. He should know that nice guys finish last. Gimme your lel, your lel, your lel ri lel. I don't know, but it's been said, our First Sergeant smokes in bed. We didn't do Jody.

My honey heard me comin on my left right on left I saw Jody runnin on his left right on left I chased after Jody and I ran him down Poor ole boy doesn't feel good now

*M.P.s* came a runnin on their left right on left The medics came a runnin on their left right on left He felt a little better with a few I.V.s Son I told you not to mess with them ELEVEN Bs

Jodie/Jody:

(US) A man who steals a soldier's girlfriend/wife when deployed, out in the field, or in training. So often referred to in cadences used during exercises that the cadences themselves have become known as jodies or jody calls.

Ain't no use in goin' home, Jodie's got your girl alone.
# China Lake – Chapter 8

In the book, Berntsen says his Jawbreaker team tracked bin Laden to Afghanistan's Tora Bora region late in 2001 and could have killed or captured the al Qaeda leader there if military officials had agreed to his request for an additional force of about 800 US troops.

But the troops were not sent and bin Laden was able to escape, he said.

His account contradicts public statements by Bush and former Gen. Tommy Franks, who maintained that US officials were never sure bin Laden was at Tora Bora.

The author was Gary Berntsen, a decorated espionage officer who led a paramilitary unit code-named "Jawbreaker" in the war that toppled the Taliban after the September 11, 2001, attacks, said CIA Director Porter Goss faces an uphill battle to fill the agency's senior ranks with aggressive, seasoned operatives.

Well, of course he wasn't or you would have gone, right, Tommy? Don't try and tell me a 4-star General isn't a politician, and we all know about politicians. Does the name William Childs Westmoreland ring a bell? He died on 18Jul05. Through the end of his life, he maintained that the United States did not lose the war in Vietnam; he stated instead that "our country did not fulfill its commitment to South Vietnam; by virtue of Vietnam, the US held the line for 10 years and stopped the dominoes from falling." It is a commentary on Westmoreland's gentlemanly character that during the acrimonious trial, Mike Wallace was hospitalized for depression, and despite the legal conflict separating the two, Westmoreland and his wife sent him flowers. Wallace's memoir is generally sympathetic to Westmoreland as a man, although he makes it clear he disagreed with him on issues. Westmoreland, 91, died of natural causes at Bishop Gadsden retirement home, where he had lived with his wife for several years.

In 1982, he filed a \$120 million lawsuit against CBS over a documentary "The Uncounted Enemy: A Vietnam Deception," which implied he had deceived President Johnson and the public about enemy troop strength in Vietnam.

At the time, Westmoreland said the question "is not about whether the war in Vietnam was right or wrong, but whether in our land a television network can rob an honorable man of his reputation."

After an 18-week trial in New York, the case was settled shortly before it was to go to the jury.

The settlement was characteristic of the general's ambivalent relationship with the press.

In his autobiography, "A Soldier Reports," Westmoreland wrote that in Vietnam, while he "tried to avoid any vendetta against the press," he sometimes resented the time he had

to spend correcting "errors, misinterpretations, judgments and falsehoods" contained in news reports.

I never knew Westmoreland, but I never liked Mike Wallace. Wallace has been criticized for his tactics, which include conducting interviews under deceptive or "ambush" circumstances in order to embarrass his quarry.

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Thinking back, the reason I really liked this house in Ridgecrest was the fact that it had a basement. It was smaller than our home in Palmdale, having only 2 bedrooms that weren't large. It had inside stairs and the old outside stairs. I believe that the inside stairs had been put in by the former owner. He had erected a concrete block wall to enclose the stairs and they ended in one corner of the basement. It was relatively easy to put in the homemade blast door. It was constructed of 3 pieces of road plate <sup>3</sup>/<sub>4</sub>" thick and bolted together. Each succeeding piece was inset <sup>3</sup>/<sub>4</sub>" and the doorframe was surrounded by similarly staggered pieces. I even put a small amount of weather stripping on the seams and rigged it to allow me to pull the door tightly shut. I picked up sandbags at the fire station and filled them with plain old desert sand. They covered the windows and the outside entrance, maybe 32" over a single piece of <sup>3</sup>/<sub>4</sub>" road plate. When I got the CD V-717 after the war, I pushed the probe out one of the sandbagged windows, notching the frame for the cable.

If we got a really high dose or radiation, those sandbags might not have been enough. 32" of sand = a protection factor of 100 and it takes maybe 3"+ of steel to get it to 1,000. How much protection did the basement walls provide where they stuck out of the ground? Probably not enough, but they had a single layer of sandbags. The fire department gave them away for free, but they limited the number you could have. I ordered more from:

Donald Davis Bags 1020 S. Church St. Ext. P.O. Box 8369, Spartanburg, S.C. 29305-8369 1-800-662-7756

Saddleback Materials Company 20712 Indian Ocean Lake Forest CA, 92630 1800-286-7263

Clue: Search the net for 'new sand bags'.

If you're reading this, you have a computer and it can search the Internet for you. I like Yahoo search, FT prefers Google. If you can't find it, you haven't looked. If you don't have it because of money, I understand. Boy, do I understand.

It was simply awful waiting in between the payments from the trust fund. They were primarily made quarterly with smaller amounts being added to the checking account monthly. My pension and disability went into Wells Fargo, the income payments from the trust into the Iowa checking account and Sharon's pension into the Iowa savings account. I didn't know the passwords, like I said and it was fine with me. You know about estate taxes, right? When the old man died in 2001, he left an estate of 2.7 million. The first million paid taxes. The next 30% went to my stepbrother and the remaining 70% were divided 50-50 between my brother's daughters and me. I hate the taxes. Strange thing for a retired auditor to say, huh? Haven't talked to the 3 of them since. They haven't called and neither have I. The word pathetic comes to mind, with the definition of arousing or capable of arousing scornful pity. The other definition is arousing or capable of arousing sympathetic sadness and compassion.

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The odds of an asteroid strike are about 1:20,000. If you have a chance, watch *End Day*. La Palma collapses, sending a 500m wave across the Atlantic, but it's only 500' high when it reaches NY and only washes ashore 2 miles (it wasn't a Deep Impact); the second scenario was a 100m wide meteor strike near Berlin creating a 2.33-mile wide, 0.289-mile deep crater according to my assumptions, but they hit it with a nuke and broke it up a little; the third scenario was a dead man on a plane with a pandemic (flu) virus that reached the UK and Canada and spread like a wildfire; the fourth scenario a particle accelerator went wrong and created a black hole that destroyed the Earth. The last scenario was said to be impossible. A scientist described the black hole as the big bang. You would barely have time to kiss your butt goodbye. Several of us have written stories about the other 3.

I believe that a 500m wave from La Palma would go much further inland and that 1:20,000 meteor strike wouldn't be intercepted by a nuclear missile. Even if it was, remember Shoemaker-Levy 9. The pandemic is coming, buy some Tamiflu and hope they develop a vaccine that works in sufficient quantity that your family can ALL get shots. This new pandemic virus doesn't discriminate by age, race or occupation. And when they announce a particle accelerator experiment, pray. I'm only guessing about God's sense of humor.

National Geographic Channel says that the greatest threat to mankind is an impact by a giant asteroid. In terms of pure danger from the impact yes, but what are the odds of that impact? If you have a shelter, you'd better have a refrigerator on the air intake. That 10-mile rock I mentioned? That could wipe out life, as we know it. It would encircle the earth with a cloud of hot air and most of the stuff thrown into the air by the impact would strike a second time. The Arizona meter crater was caused by a rock 150' across. It equaled 20mT. Anyway, Ralph was over and he and I were watching Fox News.

The renewed uplift of the Long Valley resurgent dome that began in early 2002 and ended in early 2003 largely offsetting the 2 cm of subsidence that accumulated from

early 1999 through the end of 2001, has resumed, according to USGS geologist at the Long Valley Observatory. The resurgent dome has shown major uplift, apparently distantly related to the volcanic eruption in the Coso Volcanic Field during late 2006. Earthquake activity within and adjacent to the caldera has increased since 2006, averaging 100 to 300 earthquakes per day with magnitudes up to  $M_w$  4 and an occasional event as large as  $M_w$  5. The diffuse carbon dioxide gas flux in the Horseshoe Lake tree-kill area has sharply increased, rising to as much as 300 tons per day sustained since late-2006.

"She's gonna blow, Tom."

"Ralph, Tom is my nickname, my real name is Gary. My last best buddy called me Gar-Bear."

"Where is he, Palmdale?"

"Had a heart attack and died."

"You have any other friends?"

"Clarence Floyd, but he disappeared. I suspect he and his family returned to Birmingham, Alabama, but that's just a guess. He had a bad heart too and had diabetes on top of it."

"Maybe he died."

"If he had, I would have thought Linda would have told me."

"Linda who?"

"Ron's wife. What do you make of the report by Fox?"

"Katy bar the door, here come the Indians."

"I didn't know you knew that expression. It was something my first father-in-law used to say."

"Pooh. The phrase *Katy bar the door!* is a very American exclamation, more common in the South than elsewhere, meaning that disaster impends – *watch out, get ready for trouble* or *a desperate situation is at hand*," Ralph insisted.

"Ok, but I think the better expression would be, 'Katy bar the door, here comes the *Supervolcano*."

"You don't know that, Tom. By definition, a *Supervolcano* has a VEI of 8 and is a megacolossal event that extrudes at least 1000km<sup>3</sup> of magma and pyroclastic material. Until it erupts, we won't know if it qualifies. The eruption of Long Valley 760,000 years ago only extruded 580km<sup>3</sup> of output."

"Then why does Wiki list it as a *Supervolcano*?" I asked.

"I didn't know that they did."

"They list 10 VEI-8 eruptions, 4 in the US: Yellowstone, Long Valley, Valle Grande in New Mexico and La Garita in Colorado. The biggest ever was La Garita and it put out over 5,000km<sup>3</sup>."

"So how big do you think it will be?"

"Ralph, I'm a retired tax auditor, how should I know?"

"You seem to be into preparedness."

"Yeah, I'm paranoid and I like guns."

"That one hell of a combination, a paranoid with an armory."

"Actually, I'm a recovering alcoholic with Periodic Major Depression Disorder superimposed over dysthymic disorder (low lever persistent depression). And as a drunk, I tend to be obsessive-compulsive."

"And they let you buy guns?"

"They didn't for 5 years when I was under a 5150."

"A what?"

"Danger to self or others for trying to off myself."

"With a gun?"

"I'm alive so obviously not. Pills."

"Why would you do that?"

"Sharon and I were getting divorced after 23 years."

"Forget it, Tom. You're using medical terms I don't understand. Besides, a lot of guys try to off themselves when they get a divorce. Who wanted the divorce?"

"Me."

"Why?"

"I thought the grass was greener..."

"And?"

"It was, for a while. Then I discovered the downside."

"Let me guess. She was married and running around. She got tired of you and found another turkey."

"Yeah."

"Were you always that dumb?"

"I think I finally grew up."

"And?"

"We got remarried."

"Interesting story. How did we get off the caldera and onto your personal life?"

"I said, I'm paranoid and I like guns."

"Oh, that's right. Ever kill anyone?"

"Just the two guys who were trying to break into your place."

"Not bad, one shot kills."

"It was under 100-yards."

"What I don't know is why Long Valley. We decided that it wasn't due for 100,000 years."

"Maybe it didn't read the USGS report. It seems obvious that Yellowstone didn't, it's 40,000 years late."

"What do you intend to do?"

"I need more propane for one thing. Our basement is airtight and has a LUWA filter."

"What's that?"

"An expensive air filter that cleans the air and moves enough air for up to 50 people. I see how we stand with money and how many propane tanks we can put in."

"If you put Jean and me up, I can give you hand with that. How much are they?"

"About 3 grand apiece filled."

"The best I can do is 3."

"I think we might be able to go one and top off our food supplies."

"How much propane would that give us?"

"9,900-gallons plus 100-gallons in bottles."

"10 thousand will last you how long?"

"About 6,250 hours, maybe a little more if we try and conserve. There are 365.25 days per year, 30.4375 days per month and 6,250  $\div$  24 = 260.42 days or 8½ months. I think I once figured a year's supply at 14,000-gallons. But if we're going to put in those propane tanks, we'd better get a move on, once everyone figures out what might happen, everything will become difficult to get."

"We have a small freezer and some food."

"Bring it over, we'll do a quick inventory and go to Costco and/or Sam's Club. I have to pick up my guns, too."

"They didn't say anything on TV about when it would happen."

"You want to wait until after and try to get what we need?"

"What about gasoline and diesel fuel?"

"2,000-gallons of diesel and 1,000-gallon of gas."

"Remind me not to light up anywhere around here."

"Why not, I do? You can only die in an explosion once."

This place was beginning to look like a tank farm. Maybe if Long Valley did let go, we could get one of those low interest FEMA loans and buy the empty lot next door to plant a nice garden. How do you move the ash off your stuff, use a dozer? If I didn't learn anything else from *End Day* and the other asteroid show they aired, I knew you couldn't blow up an asteroid with a nuke. We should get a hint when it was about to let go, it was only 100 miles away and the ground would really be shaking. Jean didn't look a bit like

Carrie Fisher, either. What did Carrie Nation look like? No, she's not that unattractive. She doesn't stand 6' tall and weigh 180 pounds either.

Of course I had a spare filter for the LUWA system, you could buy them but they weren't cheap. Did you realize that it didn't protect you against carbon monoxide or carbon dioxide? They can kill you too. But it was more dangerous to smoke next to the propane tanks. AmeriGas was starting to break even on the tanks. Guess what, when we bought 4 more, they rented us one, giving us a total of 12 or 10,800-gallons plus the bottles. They even set us up on a level pay plan. That's 6,800 hours, 283 days or 9¼ months. Yes there's a fireproof, radiation proof lid in the basement. Wouldn't be much good as a shelter if there weren't, now would it? I also had a push broom and a ladder. Guess what Ralph would pay for rent for the shelter space?

I looked it up and we would get ~3cm of ash per 1km<sup>3</sup> of material ejected from the LVC. Get this: The size of the next eruption in the Long Valley area will most likely be similar to the small to moderate sized eruptions that have occurred in the past 5,000 years. The hazard zones below were prepared based on these recent eruptions (explosive and non-explosive activity) that ejected less than 1km<sup>3</sup> of material from one or more vents along the Mono-Inyo Craters volcanic chain. Infrequent but much larger eruptions have occurred from other vents in the caldera in the past few hundred thousand years. The most recent activity in the area, however, suggests that an eruption of up to 1 km<sup>3</sup> of magma from a vent or vents along the Mono-Inyo chain is the most likely eruption size to use for emergency-response planning.

If my math is right, 3x580 = 1,740cm of ash and that's about (1,740x0.03280839) 57' of ash. Oh, oh, we'll need a periscope. In *Supervolcano*, they claimed that no one would survive within 600 miles of Yellowstone. Then, they contradicted that by having 3 guys survive in a missile shelter of some kind near Cheyenne, 375 miles from the eruption. The, 'stay in your homes' advice wasn't very good was it? I suppose we could always go to Frisco and hope like hell they didn't have another earthquake and we weren't mugged by queers or liberals. Anyone seen FT's girlfriend, Fineswine, lately? She's probably is on a Congressional junket to London.

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Past time to get your inoculation against seasonal affective disorder, or SAD – at least according to the American Psychiatric Assn. As Americans rush to return Christmas junk, bumping into each other in Macy's and Best Buy, the psychiatric association ponders its latest iteration of feeling bad for the holidays. And what is the association selling? Mental illness. With its panoply of major depression, dysthymic disorder, bipolar disorder and generalized anxiety disorder, the association is waving its Calvinist flag to remind everyone that amid all the celebration, all the festivities, all the exuberance, many people will "come down with" or "contract" or "develop" some variation of depressive illness.

The association specializes in turning ordinary human frailty into disease. In the last year, ads have been appearing in psychiatric journals about possible treatments for shyness, a "syndrome" not yet officially recognized as a disease. You can bet it will be in the next edition of the Diagnostic and Statistical Manual of Mental Disorders, or DSM-IV, published by the association. As it turns out, the association has been inventing mental illnesses for the last 50 years or so. The original diagnostic manual appeared in 1952 and contained 107 diagnoses and 132 pages, by my count. The second edition burst forth in 1968 with 180 diagnoses and 119 pages. In 1980, the association produced a 494-page tome with 226 conditions. Then, in 1994, the manual exploded to 886 pages and 365 conditions, representing a 340% increase in the number of diseases over 42 years.

Customs officials seized 3,000 doses of generic Tamiflu in San Francisco. There is no *generic Tamiflu*. The capsules contained vitamin C. That crap about SAD? I've been sad since I was 5 and I made it to my 60s. What else would you expect from a pessimistic cynic who believes the end of the world is coming? 57' of ash? Good God!

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"Ralph we have a problem."

"Have you been watching Apollo 13 again?"

"No, I've been calculating. According to the USGS, we'd get about 3cm, a little over an inch, of ash if Long Valley put out 1km<sup>3</sup> of discharge."

"Big deal, I'll sweep the walk."

"Yeah but! What if it put out 580km<sup>3</sup> of ash like it did the last time? That would give us 57' of ash."

"Houston, we have a problem!" Ralph frowned. "Load the tubes and raise the periscope."

"But wait," I said, "It gets worse."

"What could be worse than 57' of ash?"

"My LUWA filter doesn't filter out carbon dioxide or carbon monoxide."

"I think we'd better get some schedule 40 PVC pipe and raise your air intake and exhaust."

"They recommend using 6" diameter schedule 40 steel pipe for air intake and exhaust. If using blast valves, the air intake pipe must come in horizontally."

"Who are they?"

"Utah Shelter Systems in their description of the LUWA system. I have a  $CO_2$  scrubber. When using the Carbon Dioxide-Turbo Scrubber<sup>TM</sup>, the room atmosphere will have a constant circulation of Air-CO<sub>2</sub>, Water Vapor, & Odor Absorption. The unit can be powered by an AC/DC power supply or by a 24 volt back up battery for up to 24 hours of operation.

The stainless steel canister of the Carbon Dioxide-Turbo Scrubber<sup>TM</sup> can be configured with proper chemicals to maintain CO<sub>2</sub>, water vapor, & odor levels generated within a safe room chamber.

The stainless steel Carbon Dioxide-Turbo Scrubber<sup>™</sup> is powered by 110/24 volt 'magnetic coupled' dual fans which move 30 cubic feet per minute through the scrubber canister. The fan motors are designed to work in high levels of oxygen without electrical sparks."

"How does that work?"

"It uses electricity either 110v or 24v. It has a 6 Person capacity per Carbon Dioxide-Turbo Scrubber™ unit."

How high's the water, mama? Five feet high and risin' How high's the water, papa? Five feet high and risin'

Well, the rails are washed out north of town We gotta head for higher ground We can't come back till the water comes down, Five feet high and risin'

Well, it's five feet high and risin'

#### China Lake – Chapter 9

"How many do you have?"

"One."

"Can you get more?"

"Harvey, LA, where I got it, is a suburb of New Orleans. I doubt it."

I was a highwayman. Along the coach roads I did ride With sword and pistol by my side Many a young maid lost her baubles to my trade Many a soldier shed his lifeblood on my blade The bastards hung me in the spring of twenty-five But I am still alive.

I was a sailor. I was born upon the tide And with the sea I did abide. I sailed a schooner round the Horn to Mexico I went aloft and furled the mainsail in a blow And when the yards broke off they said that I got killed But I am living still.

I was a dam builder across the river deep and wide Where steel and water did collide A place called Boulder on the wild Colorado I slipped and fell into the wet concrete below They buried me in that great tomb that knows no sound But I am still around.. I'll always be around.. and around and around and around and around

I fly a starship across the Universe divide And when I reach the other side I'll find a place to rest my spirit if I can Perhaps I may become a highwayman again Or I may simply be a single drop of rain But I will remain And I'll be back again, and again and again and again.

With music like that, how could anyone help but like music. I'm talking about real music, not the Rap crap that's nothing but cussing. 5' high and rising, God, I hope not. Isn't it strange how when you're young, you believe in God but aren't overly concerned? Then you get to your 60s and you start thinking about dying and your faith gets better. Nobody wants to die if they're not ill and in their right mind.

The simple fact was that even if the Long Valley Caldera did blow and it was 10 times bigger than the last major eruption, it wouldn't be the end of the world. Maybe. Ten times bigger than the last time would make it about the size of the *Supervolcano* in the TV show. It could be an ELE. Do you know what that is? Extinction Level Event. I got that from *Deep Impact*. There have been several:

500 million years ago a series of mass extinctions at the Cambrian-Ordovician boundary (the Cambrian-Ordovician extinction events) eliminated many brachiopods and conodonts and severely reduced the number of trilobite species.

440 million years ago at the Ordovician-Silurian transition two Ordovician-Silurian extinction events occurred, probably as the result of a period of glaciation. Marine habitats changed drastically as sea levels decreased, causing the first die-off, then another occurred between 500 thousand and a million years later when sea levels rose rapidly.

365 million years ago in the transition from the Devonian period to the Carboniferous period about 70% of all species were eliminated. This was not a sudden event; evidence suggests that the extinctions took place over a period of some three million years.

252 million years ago, in the Permian-Triassic extinction event, about 95% of all marine species went extinct. This catastrophe was Earth's worst mass extinction, killing 53% of marine families, 84% of marine genera, and an estimated 70% of land species (including plants, insects, and vertebrate animals.)

195 million years ago, the Triassic-Jurassic extinction event eliminated about 20% of all marine families as well as most non-dinosaurian archosaurs, most therapsids, and the last of the large amphibians.

65 million years ago, the Cretaceous-Tertiary extinction event killed about 50% of all species, including the dinosaurs.

20 thousand years ago through today, humans are causing another extinction event. Hunting and over fishing have already caused extinctions and population collapses of many large land animals and fish species. Industrial development is causing habit destruction and climate changes, which are bringing about the extinction of many animals and plants throughout the world (Must have been written by a tree hugger).

So, you see, Nessie died 195 million years ago. How can anything be prehistoric? That would imply that there was something before history, and that's an oxymoron because history is everything that happened before right now. They, whoever 'they' are, are referring times before recorded history, and aren't saying that they're not historic. That company that builds the  $CO_2$  scrubber sells them to use in those safe rooms you build using duct tape and plastic.

My Folgers can has an offer for a Sandra Lee cookbook. If the offer was for Sandra Lee herself... None of which has anything to do with Long Valley. But you can't hate a man who likes Johnny Cash.

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"When do you want to go to Palmdale?"

"Now would be good, Ralph."

"How long will it take to get there?"

"It would be faster if I had a driver's license, about an hour and a half."

"Do you have insurance?"

"Sharon insured the truck." (But, it isn't any good if I'm driving)

"Are the girls coming?"

"On a shopping trip? Do you even have to ask?"

When we got to Costco, they didn't have pork steak and only whole chickens. We mostly loaded up on beef (yea!) and pork products like bacon and ham. Since there wasn't a garden, yet, we got plenty of niblets, green beans, asparagus for Sharon, condensed soups, coffee, flour, sugar, yeast, baking powder, baking soda, and on and on. If we had stopped there, I'd have been a happy man. But no, she had to go to Sam's Club and get pork steak and a few other things. I told her she didn't get enough macaroni and cheese and to load up on some at Sam's. Ralph and I dropped Sharon and Jean at Sam's and headed over to Santa Fe Gun Galleria to pick up my new guns.

Big mistake, but then again, I made a lot of mistakes. We didn't have any problem picking up the guns, but when we got back to Sam's Club and I saw the carts, it was Katy Bar the Door. I was ready to put a clip in the Browning and break it in.

"Did you buy more macaroni and cheese?"

"30 boxes."

Whew, I thought I was a goner. I could eat macaroni and cheese while she had pork steak. I like pork steak about 4 times a year, maybe less. All that grease doesn't work well with my low fat diet. Sharon makes great fried chicken but when you have fried chicken twice a week and pork steak at least once a week, you'd give your soul for a hamburger. Those we have once a month (I hope the devil isn't listening). Do you have any idea how many flavors of rice-a-roni there are? 38 too many (18 rice-a-roni and 16 pasta-roni plus 4 homestyle deluxe)! Kraft made their macaroni and cheese cheesier

and it can't hold a candle to Anthony's. Sharon hates Anthony's, surprised? But, she loves pork steak. Answer: Because, it seemed like the thing to do at the time!

o

I was just grumpy and it was my own fault. 99 bottles of beer on the wall, 99 bottles of beer... Take one down, pass it around... 98 bottles of beer on the wall!

After Ralph and I had pulled all of the sandbags off, earlier, we'd put their things in the basement. I was sure tempted to not replace the sandbags. Oh, well. Maybe Long Valley would be radioactive. We got back to Ridgecrest and unloaded. Ralph and Jean put some of their things in their spare refrigerator and their freezer, and we in ours. The rest they took home. I dismantled the Browning, made sure it was clean and well lubricated. I reassembled it and popped in a 15-round magazine. It went into my waist band holster in the small of my back. Ouch, that was uncomfortable and I didn't have a plan B. However, I had that box of leftover gun stuff that I'd finally found. I had several alternatives, but I went with the little belt slide like Ranger Walker wore. It wasn't the Bianchi Model 5 Black Widow, it didn't have the strap.

We knew what we faced if the Long Valley Caldera erupted: ash plume, pyroclastic flow, lahars, flank collapse and lava flows. Flank collapse was what had happened at Mt. St. Helens and Ralph and I agreed we could strike it off the list. Neither did we believe a lahar (mud flow) would make it this far and a pyroclastic flow would be limited. The 6000-year-old Koya flow in southern Japan traveled more than 60 km from its source, ten of which were over open water! The Koya flow left a deposit that was only two meters thick over its 60 km extent.

A single Plinian-type eruption may generate hundreds of pumice flows, which typically flow down valleys radiating outward from the summit of the volcano. Individual flows may vary in length from a few kilometers to tens of kilometers. These are miniscule, however, in comparison to the massive pumice flows generated by caldera collapse. Caldera-generated flows are not restricted to valleys, but rather fill in valleys and adjacent low ridges to produce pumice-dominated pyroclastic sheet flows that can obliterate an area the size of Ohio in a few minutes. These huge eruptions can eject a thousand cubic kilometers of material from ring fractures in just a few hours. The last such eruption on earth took place at Toba, Indonesia, about 74,000 years ago to deposit an ignimbrite with a volume of over 2000 cubic kilometers. Similar eruptions in the United States occurred less than two million years ago at the Long Valley, Valles, and Yellow-stone calderas.

Resurgent calderas are the largest volcanic structures on earth. They are associated with massive eruptions of voluminous pyroclastic sheet flows, on a scale not yet observed in historic times. The youngest of these resurgent calderas is the 74,000-year-old Toba Caldera on the Indonesian Island of Sumatra. The Toba eruption generated 2800 times more pyroclastic material than the moderate Plinian eruption of Mt. St. Helens in 1980. There are three resurgent calderas in the United States less than 1.5

million years old – the Valles Caldera in New Mexico, the Long Valley Caldera in California, and the Yellowstone Caldera in Wyoming.

A pyroclastic surge is a turbulent, low-density cloud of hot rock debris and gases that moves at extremely high speeds. Because surges are low density, they tend to spread over large areas and move up and over ridge crest's (Ridgecrest?) easily. By contrast, pyroclastic flows are high-density masses of hot rock debris and gases that tend to be confined in valleys. Rock fragments in pyroclastic flows range widely in grain size and consist of dense rock, pumice, or both. Individual pyroclastic flows, worldwide, range in length from less than one to more than 200 kilometers, cover areas from less than one to more than 200 kilometers, cover areas from less than 0.001 to more than 1000 cubic kilometers.

The June 1912 eruption of Novarupta Volcano altered the Katmai area dramatically. Severe earthquakes rocked the area for a week before Novarupta exploded with cataclysmic force. Enormous quantities of hot, glowing pumice and ash were ejected from Novarupta and nearby fissures. This material flowed over the terrain, destroying all life in its path. Trees up slope were snapped off and carbonized by the blasts of hot wind and gas. For several days, ash, pumice, and gas were ejected and a haze darkened the sky over most of the Northern Hemisphere. When it was over, more than 40 square miles of lush green land lay buried beneath volcanic deposits as much as 700 feet deep. At nearby Kodiak, for two days a person could not see a lantern held at arm's length. Acid rain caused clothes to disintegrate on clotheslines in distant Vancouver, Canada. The eruption was ten times more forceful than the 1980 eruption of Mount St. Helens. In the valleys of Knife Creek and the Ukak River, innumerable small holes and cracks developed in the volcanic ash deposits, permitting gas and steam from the heated groundwater to escape. It was an apparently unnamed valley when the 20th century's most dramatic volcanic episode took place. Robert Griggs, exploring the volcano's aftermath for the National Geographic Society in 1916, stared awestruck off Katmai Pass across the valley's roaring landscape riddled by thousands of steam vents. The Valley of Ten Thousand Smokes, Griggs named it.

Why stay? They didn't suggest that we evacuate 100+ miles from Long Valley. Maybe these were the same people as in the *Supervolcano* film. Ralph and I installed the 6" 60' schedule 40 steel pipes, just in case. It was strapped to the eve. Even if the pyroclastic flow did reach to China Lake, we'd have warning and could take cover. We could also shut down the blast valves and if the house burned, we had insurance. The only problem with a split foyer was that ½ the basement was above ground.

Sharon called Farmers to find out if our homeowners policy covered volcanoes. The answer was yes and no. Direct damage was covered but indirect wasn't. We had home insurance, flood insurance and earthquake insurance. By God, if we weren't covered, I'd become a real Californian and sue. And if Farmers did sell it, it wasn't available because of the situation in Long Valley. Allow me to explain. Every time there is a major, damaging earthquake, there is usually a 90-day moratorium on writing new policies, even now that the state was the sole insurer. The CEA didn't explain and I didn't feel like digging out the policy.

It was like when Derek went to Iraq, wait and worry. We had done everything we could except leave. We even had rain caps on those 60' pipes. If we got 57' of ash, it wouldn't matter that the antenna mast was only 40'.

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This just in. The USGS has announced an increase in the Long Valley earthquake swarm that has had many concerned over the past few weeks. According to USGS's Menlo Park office, there is definite evidence that the congealed magma beneath Long Valley has started to soften and might eventually melt. Scientists speculate that this is a result of basalt injections. In the past 15 days, there has been a 50% increase in the number of temblors and a 25% increase in their intensity, reaching M5-M6. The congealed magma extends from Mammoth Mountain in the SW to Glass Mountain in the NE.

FEMA officials, together with state and local officials have stated that everyone within a 30 mile radius should have already evacuated and those in the 30-70 mile range should either evacuate or prepare immediately to evacuate with no more than 30 minutes' notice. As of 9am PST, Long Valley is under a Watch, or Yellow, Condition. Yellow signifies a period of Intense Unrest.

"What comes after yellow?"

"Orange and then 4 levels of red, Ralph."

"What does orange mean?"

"Accelerating intense unrest with an eruption likely within hours to days."

"And red?"

"LEVEL 1: Minor eruption; LEVEL 2: Moderate explosive eruption; LEVEL 3: Strong explosive eruption; and, LEVEL 4: Massive explosive eruption," I answered, reading from my computer printout.

"Hmm. I reckon we're worried about the Level 4 eruption, right?"

"Oh, I hope not, 57 feet."

"Won't it depend on the direction of the wind?"

"We could get lucky and a Pacific storm could blow in about the time the caldera blew."

"Are you a church going man?"

"Sure, I go to church. The last time I went was right after 9/11."

"What?"

"Well, I don't want to overload God with my problems."

"I think He could handle them."

"I have no doubt, Ralph. But, what would the remainder of the world do? I think I already wore out about 4 Guardian Angels."

"Do you believe in Angels?"

"I believe in the scientific method. I don't have any proof that they don't exist, but I don't believe they look like Nicholas Gage."

"Patrick Swayze?"

"He was a ghost, not an Angel."

o

Ralph and I hit it off well, partially, because he was a movie fan. He didn't collect them like Ronald McDonald had, but he had a few of the good ones. Our taste in films was actually quite similar. It was pretty close to tick, tick, tick time, if we weren't already there. We'd start the countdown clock if Long Valley went to Orange. Those 57' feet of ash were the worst case scenario, just so you understand.

In the past, I'd always sent my heroes to Reno because 760,000 years ago, Reno wasn't in the Bishop tuff. It would depend on many things, including the Mexican twins, El Niño and La Niña. Pacific storms mostly come during the winter. It wasn't one of those take it to the bank sorts of things, however. The El Niño and La Niña have effects on both the Atlantic and Eastern Pacific Tropical seasons. El Niños enhance the activity in the Eastern Pacific and tend to suppress activity in the Atlantic. La Niñas have the opposite effect. They suppress activity in the Eastern Pacific, and enhance it in the Atlantic Hurricane season.

The causes are both direct and indirect. In El Niños, waters are often warmer than normal not only in the El Niño equatorial zones but areas north and south along the West Coasts of North, Central and South America. In La Niña years, waters in these same areas tend to be cooler than normal. Tropical storms and hurricanes that develop in the Eastern Tropical Pacific usually form off the South and Southwest Coast of Mexico. When you think about it, there are two kinds of Pacific storms that affect the West coast, those that come down from the Pacific Northwest and those that come up from the Pacific Southwest. The one over New Years of 2006 had been one of the Pacific Northwest storms that flooded, among other places, San Anselmo, CA. That's where my friend Mark Glickman had his office. Lynette lived across the street from the office and I heard on TV that some of those streets got 4' of water. Sure hope they had flood insurance.

Southern California's legendary Santa Ana winds wreak havoc every year, creating hot, dry conditions and fire hazards. Despite their often-destructive nature, a study of the "Devil Winds," conducted using data from NASA's Quick Scatterometer (Quikscat) spacecraft and its SeaWinds instrument shows the winds have some positive benefits.

"These strong winds, which blow from the land out into the ocean, cause cold water to rise from the bottom of the ocean to the top, bringing with it many nutrients that ultimately benefit local fisheries," said Dr. Timothy Liu, a senior research scientist at NASA's Jet Propulsion Laboratory, Pasadena, Calif., and Quikscat project scientist. Santa Ana consequences include vortices of cold water and high concentrations of chlorophyll 400 to 1,000 kilometers (248 to 621 miles) offshore.

High pressure develops inland when cold air is trapped over the mountains, driving the dry, hot and dusty Santa Ana's (also called Santana's and Devil's Breath) at high speeds toward the coast. The winds, occurring in fall, winter and spring, can reach 113 kilometers (70 miles) per hour. They happen at any time of day and usually reach peak strength in December. Telltale signs on the coast include good visibility inland, unusually low humidity and an approaching dark brown dust cloud.

Special place, California, they have all kinds of winds and then the ground shakes. Sometimes, it even erupts. LVO was established as a result of 2 things, the disaster at Mt. St. Helens and a swarm of earthquakes.

Future Eruptions in California's Long Valley Area – What's Likely?

Long Valley Caldera and the Mono-Inyo Craters chain form a large volcanic complex in eastern California that has had persistent earthquake activity and ground uplift in recent decades. Volcanoes have been active in the area for millions of years, and future eruptions are certain to occur. When the next eruption in the area does occur, it will most likely be small and from a site in the Mono-Inyo chain.

The three Inyo Craters, part of the Mono-Inyo Craters volcanic chain, stretch northward across the floor of Long Valley Caldera, a large volcanic depression in eastern California. During the past 1,000 years there have been at least 12 volcanic eruptions along the chain, including those that formed the Inyo Craters and South Deadman Creek Dome.

After four strong (magnitude 6) earthquakes rocked the Long Valley area of eastern California in May 1980, US Geological Survey (USGS) scientists also detected evidence of renewed volcanic unrest in the region. They discovered that the central part of Long Valley Caldera, a broad depression formed in a cataclysmic volcanic eruption 760,000 years ago, was slowly rising. Because such ground deformation and earthquakes are common precursors of volcanic eruptions, the USGS has continued to closely monitor the unrest in this region.

It is natural to wonder when and where the next volcanic eruption might occur in the Long Valley area. Geologic processes generally proceed at a slow pace, and when viewed on the scale of a human lifetime, volcanic eruptions and destructive earthquakes happen rarely. Nevertheless, the long history of volcanic activity in the Long Valley area indicates that future eruptions will occur.

Geologists studying the Long Valley Caldera have found that following its creation in the violent eruption 760,000 years ago, clusters of smaller volcanic eruptions have occurred in the caldera at roughly 200,000-year intervals. About 100,000 years ago, the most recent of these eruptions formed the Mammoth Knolls, low hills just north of the Town of Mammoth Lakes.

Mammoth Mountain, a young volcano on the rim of Long Valley Caldera, was built by numerous eruptions between 220,000 and 50,000 years ago. Volcanoes in the Mono-Inyo Craters volcanic chain, which extends from just south of Mammoth Mountain to the north shore of Mono Lake, have erupted often over the past 40,000 years. During the last 5,000 years, an eruption has broken out somewhere along this chain every 250 to 700 years. The Inyo Craters and nearby lava domes were formed by a series of small to moderate eruptions 550 to 600 years ago, and the most recent eruptions along the volcanic chain took place about 250 years ago at Paoha Island in Mono Lake.

The pattern of volcanic activity over the past 5,000 years suggests that the next eruption in the Long Valley area will most likely happen somewhere along the Mono-Inyo volcanic chain. However, the probability of such an eruption occurring in any given year is less than 1%. This is comparable to the annual chance of a magnitude 8 earthquake (like the Great 1906 San Francisco Earthquake) along the San Andreas Fault in coastal California or of an eruption from one of the more active Cascade Range volcanoes in the Pacific Northwest, such as Mount Rainier.

As long as increased volcanic unrest (including earthquake swarms, ground deformation, and CO2 gas emissions) continues in the Long Valley area, the chances of an eruption occurring in the near future will remain somewhat increased. However, evidence from large volcanic areas and calderas worldwide shows that unrest, such as the current activity in eastern California, can persist for decades or even centuries without leading to an eruption. Nevertheless, recent eruptions at Rabaul Caldera in Papua New Guinea (1994) and the Izu volcanic complex in Japan (1989) following short periods of unrest emphasize the need to closely monitor restless calderas. When an eruption does break out in the Long Valley area, its impact will depend on the location, size, and type of eruption, as well as the wind direction. Also, an eruption during the winter months could melt heavy snow packs, generating mudflows and locally destructive flooding.

Most likely, the next eruption will be small and similar to previous eruptions along the Mono-Inyo volcanic chain during the past 5,000 years. Such eruptions typically begin with a series of steam-blast explosions as rising molten rock (magma) encounters and vaporizes underground water near the Earth's surface. These blasts can throw large blocks of rock and smaller fragments hundreds of feet into the air, leaving deep, circular pits like the Inyo Craters.

If magma reaches the surface, gases trapped within it can escape explosively, hurling volcanic ash (tiny fragments of the solidifying magma) as high as 6 miles or more. Airborne volcanic ash can be carried hundreds of miles downwind, and the amount and size of falling ash decrease with distance from the eruption site. Thin accumulations of ash pose little threat to life or property, especially in areas where the roofs of most buildings are constructed to withstand heavy snow loads. However, even a light dusting of fine volcanic ash can close roads and seriously disrupt communications and utilities for weeks or months after an eruption.

The eruptions that led to the creation of the 600-year-old South Deadman Creek Dome covered the area of what is now the Town of Mammoth Lakes with a layer of volcanic ash about 1 inch thick. During these eruptions, the wind first blew toward the northeast and later toward the southwest. These eruptions also produced fiery flows of hot ash (pyroclastic flows). Depending on the wind direction and the location of an eruption site, future eruptions in the Long Valley area could spread volcanic ash over the communities of Mammoth Lakes, June Lake, or Lee Vining.

Explosive volcanic eruptions may also produce fiery flows of hot ash (pyroclastic flows) that can sweep over the ground at speeds greater than 100 miles an hour, devastating everything in their paths. In the past 5,000 years, eruptions from several sites along the Mono-Inyo chain have produced narrow, tongue-like pyroclastic flows that extended more than 5 miles. Fortunately, the main population centers in the Long Valley area are far enough from probable eruption sites that they are unlikely to be directly impacted by future pyroclastic flows.

Less violent eruptions have also taken place in the Long Valley area. These eruptions typically began with mild explosions that formed relatively small volcanic cones less than 1,000 feet in diameter and then produced hot, fluid lava flows that extended a few miles. Eruptions of this type about 5,000 years ago created the Red Cones, just south of Mammoth Mountain. Flows of fluid lava were also erupted from sites near the base of Mammoth Mountain between 400,000 and 60,000 years ago. Such flows are highly destructive to property, but seldom endanger people because lava flows rarely move faster than a brisk walk.

Although the chance of a volcanic eruption in any given year is small, future eruptions will occur in the Long Valley area. Because volcanic unrest can escalate to an eruption in a few weeks or less, USGS scientists are closely monitoring activity in this region. To be able to provide the public with reliable and timely warnings before an eruption, the USGS has joined local and State authorities in developing procedures for responding to changing levels of volcanic unrest in the Long Valley area. The ongoing work of the USGS Volcano Hazards Program in this and other volcanic regions of the United States helps to better protect people's lives and property from volcano hazards.

# China Lake – Chapter 10

They don't always get it right. They can speculate all they want, but guessing is just guessing. It was more than apparent that they were revising their estimates if they - USGS were going to yellow. Didn't Tom Brokaw or someone in *Supervolcano* say the magma chamber beneath Yellowstone was on the order of 25,000km<sup>3</sup>? That's about 5997.818964473mi<sup>3</sup>. Please explain how 25,000km<sup>3</sup> of melted basalt could produce and eruption of 6,000mi<sup>3</sup>. They rounded? 1mi<sup>3</sup>  $\approx$  4.168181825km<sup>3</sup>. That means that every drop of the magma came out of the ground. I don't think so. I'd better quit picking on them before they start picking on me. The government is out to get us, you know. They found a new way, denying us the services we pay our tax dollars for.

Who is the largest employer in the United States? That depends. The largest Private employer is Wal-Mart with 1.1 million employees. The largest employer, period, is the United States Government. And of course, they get wages, benefits, etc.

January 15, 2003 – WASHINGTON – Federal officials plan to fix the government's fractured payroll processing system by consolidating 22 payroll processing centers into two, a move that should save \$1.2 billion over a decade, federal officials said today.

The hope is that consolidation will reduce the annual cost of writing payroll checks for 1.9 million civilian employees, as well as avoid spending millions of dollars to repair and upgrade legacy systems at some of the nearly two-dozen payroll processing centers. Check printing costs now total an average of \$77 per employee each year.

The idea that federal agencies developed over time "into 22 different providers with different ways of processing the same thing ... is nuts," said Mark Everson, the deputy director for management at the White House Office of Management and Budget.

Whoa, they're going to saving \$120 million a year in payroll processing costs. How darn big is the payroll? Numbers that big give me a nosebleed. Bigger than any audit assessment I ever made, let me assure you.

o

Too many numbers in my stories? Tough. The thing I like about numbers is that there are only 10 digits, whereas the English alphabet has 26 letters: there, their and they're, or was it two, to and too? Xanax, pronounced Zan-axe doesn't even have a 'Z' in the name. Do you know why they warn you that Avandia can cause an increased chance of pregnancy? That's my diabetes medicine. Well, as it turns out, it's also used to treat ovarian cysts in overweight teenage girls and that why the warning on TV. After they spend 20 seconds telling you how good the drug is for you, they spend 40 seconds warning you about the side effects.

Sure, I have restless leg syndrome, so what? Just what I need is another pill. Probably costs \$5 a pop. I think the RLS is somehow related to the diabetic neuropathy, so who

cares? Getting back to the Avandia. If I get pregnant, I'm going to sue! On 1/3/06, I got new prescriptions and got one for everything I take in 30-day supplies. It's going to cost me \$300 a month until I hit the limit. After the \$2,250 limit, during July, that will go down to \$108 a month and after \$3,600, it will go down to \$63 per month. The real shame is that they don't count the \$51/month premium I pay in the costs. And doctor wrote prescriptions for 2 of my BID meds as QD. That was Sharon's fault, I always check the Rx, but she wouldn't let me. Thanks George, you accidentally got something right.

This has a built in savings plan for my Humalin. Humalin 70/30 comes in 10ml bottles and I take 20 units a day or 1,200 units a month. Times 12 months equal 14,400 units. But, because of the bottle size, I'll get 24,000 units per year. I'm still going for all the drug samples I can get. A person has to have that backup supply for when the meteor hits us, unless it's 10 miles across. One other thing, once all the people have Part D coverage, drug companies will suddenly begin giving doctors samples again. He increased my Zoloft because Derek is in Baghdad and I didn't even ask. So by late January I got happier.

o

"How big was that one?"

"M<sub>w</sub> 6?"

"Are we still yellow?"

"Let me turn on the TV and check, Ralph."

It was like watching that plane veering towards tower 2. You knew it was going to hit and you were totally helpless. We were in Ridgecrest only 105 miles from Long Valley and we didn't know how big the eruption would be. A pyroclastic flow goes about 150mph so if it got this far, it would take 40 minutes. In those 40 minutes we could do one of two things, bug out for the southland or shelter in place. We were leaning towards the bug out option because of the 57' of ash. However, that assumed the USGS was wrong and this eruption would be as big as the one 760,000 years ago. It could go one of 3 ways: they were right = 1km<sup>3</sup> of ash; they were wrong and I was right = 580km<sup>3</sup> of ash; or, we were both wrong and it would be > 580km<sup>3</sup> of ash. I failed to consider the other choice, we were both wrong and it was > 1km<sup>3</sup> and < 580km<sup>3</sup> of ash. If it were 100km<sup>3</sup> of ash, we'd get 300cm of ash fall, 118". We could survive anything under 10', IMHO and 10' was 120". Talk about splitting hairs! Anyone want to vote? My vote is that the darned thing settles down and doesn't erupt, thank you very much.

"What about that one?"

"Bigger."

"What did they say on TV?"

"Orange. Accelerating intense unrest with an eruption likely within hours to days."

"Want to watch a movie?"

"Fine by me, Ralph, what do you have?"

"Supervolcano," he chuckled.

"With or without Brokaw?"

"Without. Don't you like him either?"

"Go ahead and put it on. He's a reporter, what can I say? 600 yards?"

"Huh?"

"Never mind, different story."

"Fine, but explain yourself."

"In my stories, I've killed the President about 20 some times and Geraldo Rivera every chance I got."

"You don't like him either?"

"Geraldo? I was ambivalent until he drew the map in the sand. After that, I shot him every chance I got, in my survival fiction, Ralph."

"You write?"

"I type. Mostly I string together some dialogue with information about survival questions from various sources. I go by Tom because my handle on the website was Tired Old Man. It seems if I've always had a nickname. When I was in the Air Force, they called me Charlie."

"As in?"

"Charlie the Tuna. Remember the old Star-Kist ads?"

"Not really, no."

"Charlie the Tuna, representative of Star-Kist Tuna, made his first appearance in a TV commercial for Star-Kist, in 1961. He has starred in over 85 Television commercials, always trying to learn good taste. But the answer was always 'Sorry, Charlie. Star-Kist wants tuna that tastes good, not tuna with good taste.' They figured I was a loser be-

cause I was a drunk and that's the name they gave me. I was so dumb I didn't realize they were making fun of me."

"When did you quit?"

"My sobriety date is January 2, 1999. I've got 9 plus years and have had since 1/2/08. Never thought I'd make it to 65. Sharon will be 61 this year."

"When do we go to red?"

"I'll tell Sharon to leave the TV on upstairs and we'll watch the end of the world, again."

1) In an update to a preliminary public health notification issued October 27, the US Food and Drug Administration advised healthcare professionals to cease using a respiratory gas administration device Vapotherm 2000i, made by Vapotherm, Inc, due to the risk for patient exposure to Ralstonia species.

2) Guidant Corp. has reported 18 additional failures of its implantable heart devices, including one patient death, according to US regulators. The US Food and Drug Administration said on Wednesday that Guidant had reported the failures over the past two months, bringing the total number of clinical failures worldwide to 35, including five patient deaths, as of December 21. The FDA said the malfunctions occurred with Guidant's Prizm 2 DR models made on or before April 16, 2002, and two Contak Renewal models made on or before August 26, 2004.

Another notable post was a long, profuse apology to Emergency Department doctors and nurses, which ends up indicting those same healthcare workers, as well as the industry in general, the government, and society:

I'm sorry that throughout the shift I will continue to bring fresh meat to the grinder, that is I will be forced to transport patients from 'outside' into your department, where they will need to be looked after and assessed by your own good selves.

I'm sorry that the police cannot look after drunks on a Friday night, they worry that they will choke to death in the cells, and so we get called – and we have nowhere else to bring them except your department. Sorry.

I'm sorry that I bring in those serious cases five minutes before your shift finishes. If it's any consolation it's probably five minutes to the end of our shift that people decide to have their heart attacks, their amputations and their dissecting aortic aneurysms. Like you this means we get off late as well. I'm sorry, but it's not my fault. From: Random Acts of Reality: Diary of an EMT

o

Ralph and I made it all the way through *Supervolcano* and he was just heading home when the TV blared that Emergency Alert System Warning.

"Ralph, you'd better go get Jean and I'll see what's up. Then we can decide whether or not to bug out."

The USGS had only been at orange for about 4 hours – that was quick. Remember I mentioned *End Day*? Each of the 4 little scenarios ended with the same message, it's not a question of if; it is only a question of when. The same thing can be said for the *Big One*, the massive earthquake on the San Andreas. It can also be said for Yellowstone and Long Valley erupting. Ask Harry Truman. He's about 600' under, still in his St. Helens Lodge. *I think the whole damn thing is over exaggerated...Spirit Lake and Mount St. Helens are my life...You couldn't pull me out with a mule team.* 

# My Fellow Americans,

This is not a drill. The occurrence of larger earthquakes accompanied by harmonic tremor, more vigorous explosions, and presence of sulfur dioxide has led scientists to suggest that there is an increased possibility of an eruption of the Long Valley Caldera involving magma. Attempts to obtain aerial photographs of the caldera were unsuccessful due to poor weather. All flights in and near the area of the Long Valley Caldera have been diverted.

As of, uh, 5 minutes ago, the USGS has issued a Level Red Warning for Long Valley. Indications are that we may expect a massive eruption. Therefore the Long Valley Observatory has issued a Red Level 4 Warning from its Menlo Park office. The Department of Homeland Security is mobilizing and will provide aid and assistance as required.

Anyone within 70 miles of the Caldera who hasn't should evacuate immediately. I repeat, anyone within 70 miles of the Caldera should evacuate immediately. The Governor of California has assured this office that the warning went out 4 hours ago. Initial indications are that the explosive eruption will be smaller than the last major eruption but far larger than the USGS expected. Estimates are of an eruption of approximately 75km<sup>3</sup> of volcanic ash and debris.

Please stay tuned to your local station for further updates.

"Who was that guy?"

"I think he's the new head of Homeland Security, Sharon."

"What's the word?" Ralph asked.

"The man said 75km<sup>3</sup> of volcanic ash and debris."

"I vote we stay," Ralph replied.

"Your funeral, Ralph. Sharon what do we need to take to the basement?"

"Oh, oh. I forgot to empty the refrigerator," Jean said rushing out the door.

"You'd better go after your guns and things, Ralph," I advised.

"Be right back."

Ralph was back in about 5 minutes with a cart. On it were all of the boxes of ammo he kept at his house and their weapons. Jean was pulling a Stater Bros. Grocery cart full of things from their refrigerator and pantry. It was as if the ground was trembling mildly, but continuously. Ralph and I got the ammo downstairs while the girls finished moving the food. We went back upstairs and got Sharon's Phillips TV. Any port in a storm, I guess. My old Panasonic was just about on its last legs. He was younger so he took the TV and I grabbed Sharon's DVD/VHS combo player. She came back upstairs with Jean and they grabbed all the movies from the living room.

I was starting to get a little worked up so I popped a Xanax. Every once in a very great while I get what some call a Migraine equivalent. Migraine equivalent is a migraine aura that is not followed by a headache also called acephalic headache. This form of migraine often develops after age 50 if you had migraines with aura when you were younger. Usually the neurological symptoms consist of streaks or points of light moving across your field of vision.

o

Some people with migraines develop an aura within 30 minutes before they develop a migraine headache. Symptoms of the aura include visual disturbances such as wavy lines, flashing lights, blind spots, or distortions of objects. Other symptoms include tingling or a "pins-and-needles" sensation in the hands. A few people have problems putting words in the right order, have numbness in the hands, shoulders, or face, feel weak on one side of the body, or feel confused. Aura symptoms occur gradually, usually within 4 to 20 minutes, and do not last for more than 60 minutes. You may only experience one symptom of an aura or several, but symptoms occur one after the next and not all at once. Sometimes the aura fades as the headache pain and other symptoms begin. Other times it may persist into the early stages of the headache. My solution was always to take a Valium when I had it and in more recent times, a Xanax. The first time I got it, it was described as a blind rage.

When I first discovered what I just told you back in 2006, I was looking on WebMD for pseudo migraine. Try and picture a ring of lights in your vision made up of jagged lines so that it resembles a circular saw blade or crude gear. You are basically blind because you can't see through the ring of bright lights. Darned if I know what it is, but the first time it happened in 1979, the doctor told me to chill out or die. Naturally, I took a chill-pill. Doesn't happen often, but when it does, it's scary. I searched the web a second

time using 'pseudomigraine' and guess what, it exists! A military doctor had quite an article on it. I guess this was just one of those times that I needed a chill-pill.

"Pseudomigraine with temporary neurologic symptoms and lymphocytic pleocytosis is a self-limited syndrome of unknown origin characterized by headache accompanied by transient neurologic symptoms and cerebrospinal fluid lymphocytosis. Patients with this condition are between 15 and 40 years of age. The syndrome is more frequent in men. The clinical picture encompasses one to 12 episodes of changing variable neurologic deficits accompanied by moderate to severe headache and occasional fever. These headaches are described as predominantly throbbing and bilateral with a variable duration, mean 19 hours. The average duration of the transient neurologic deficit is 5 hours. Sensory (78% episodes), aphasic (66%), and motor (56%) disturbances are the most common. Migraine-like visual symptoms are relatively rare (18% episodes).

Patients are asymptomatic between episodes and after the symptomatic period (duration > 3 months). Lymphocytic pleocytosis (10 to 760 cells mm) and increased cerebrospinal fluid protein are found with negative bacteriologic, viral, fungal, and immunologic studies. Brain computed tomography and magnetic resonance imaging are normal, but an electroencephalogram frequently shows focal slowing over the symptomatic brain area. Single photon emission computed tomography reveals transient focal areas of decreased uptake consistent with the clinical symptoms. It is possible that pseudomigraine with temporary neurologic symptoms and lymphocytic pleocytosis could result from an activation of the immune system secondary to a recent viral infection, which would produce antibodies against neuronal or vascular antigens. This autoimmune attack may induce an aseptic leptomeningeal vasculitis, accounting for the headache and the transient symptoms likely through a spreading depression-like mechanism."

Like the guy said, "Hey doc, can you put that in leman's terms," LOL. I think he meant layman's terms, but what do I know? I get the visual symptoms each and every time. But, I rarely get a bad headache, or else I'm too chilled out to notice. More recently, I HAVE been taking a couple of Tylenol ES for a headache. What the heck, I'm not going to live forever. Got to watch the Tylenol, it's the number 1 cause of liver failure. It can fail, just as long as it doesn't hurt. Bet it would... ain't gonna find out.

o

We'd no more than settled in, with the blast door closed of course, than the ground shook like God had gotten very angry with us. I was thinking 'thar she blows', as in the caldera erupted. Buzz, wrong, go to the end of the line. That nice steady rumble under our feet was the caldera going. Much to all of our surprise that locked up section of the San Andreas let loose, probably triggered by the caldera erupting. Anyway, I was thinking M<sub>w</sub> 8+. Buzz, wrong, end of the second line. At this point in time, KERO was giving us blow by blow on the caldera and maybe the USGS was close, definitely less than 200km<sup>3</sup>. However, Bakersfield is closer to the San Andreas than we are and you could see them being shaken around a bit in the studio.

Earthquake, the announcer said followed by The Big One.

Poop, they went off the air. We surfed the channels looking for another station and finally scored, CNN, e.g., the Communist News Network. You know about that right? Pravda East = NY Times, Pravda West = LA Times, Pravda North = Boston Globe and Pravda South = Washington Post, Pravda North Central = Chicago Tribune all led around by the Communist News Network. The real Pravda wasn't nearly as bad as these people.

The USGS now estimates an ejection of up to 200km<sup>3</sup> of ash and debris from Long Valley. The eruption apparently triggered a major earthquake on the San Andreas Fault. CNN has been unable to reach the Pasadena office of the USGS and we take you now to the USGS National Earthquake Information Center in Denver.

The initial estimate of the recent quake in California is  $M_w$  8.8. At this time the NEIC does not have a Moment Magnitude or any kind of estimate on the Mercalli Intensity Scale, but it is possible that this earthquake could reach as high as level XI or XII. Moment is a physical quantity proportional to the slip on the fault times the area of the fault surface that slips; it is related to the total energy released in the earthquake. The moment can be estimated from seismograms and also from geodetic measurements. The moment is then converted into a number similar to other earthquake magnitudes by a standard formula. The result is called the moment magnitude. The moment magnitude of earthquake size that is valid over the complete range of magnitudes, a characteristic that was lacking in other magnitude scales.

Because of the limitations of all three magnitude scales, ML, MB, and MS, a new, more uniformly applicable extension of the magnitude scale, known as moment magnitude, or MW, was developed. In particular, for very large earthquakes moment magnitude gives the most reliable estimate of earthquake size. New techniques that take advantage of modern telecommunications have recently been implemented, allowing reporting agencies to obtain rapid estimates of moment magnitude for significant earthquakes. The Modified Mercalli Intensity value assigned to a specific site after an earthquake has a more meaningful measure of severity to the nonscientist than the magnitude because intensity refers to the effects actually experienced at that place. When coupled with the effect of the explosive eruption at the Long Valley Caldera, there are simply too many variables for any meaningful estimates at this time. Back to Atlanta.

For the benefit of those unfamiliar with the Modified Mercalli Intensity scale, level XI is where few, if any masonry structures remain standing. Bridges are destroyed. Rails are bent greatly. And level XII is where damage is total. Lines of sight and level are distorted and objects thrown into the air. Stay tuned to our continuing coverage.

"For crying out loud, try to get Fox News, please. I'm beginning to feel slimy just listening to those guys."

"Take a chill-pill, Tom."

"Already took one. 2 times 57 equals 114'. Now they tell us. What can I say? "It's been nice to know you?"

"Check your weather station and see what the wind direction is."

"Oh, yeah. Hmm, 87°, that's almost due east. Maybe it won't be so bad after all."

"You put in a periscope?"

"Not lately, Ralph. Didn't put in any torpedo tubes either. However, I have an elephant gun."

"What caliber?"

"A .375 H&H magnum."

"Stinkin' brown bear rifle. An elephant gun is a Winchester Model 70, Safari Express ~\$1,100 in .458 Winchester Magnum or a Weatherby Mark V ~\$2,900 in .460 Weatherby Magnum. How much elephant ammo?"

"240 rounds."

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For 8+ days the LVC erupted. We eventually lost TV because of all of the lightning. The first aftershock on the SAF was about M7+. I opened the door after a week and we went topside. Ash was still falling, but Ralph had been right to have me check the wind direction, we had ~18". I got that push broom and ladder and he went up on our roof and cleared the ash. Then he did the garage and finally his house and garage. Did you also know that there is something they call a volcanic winter? I didn't, but I suspected as much. On average, such super-eruptions and subsequent volcanic winters occur on our planet every 50,000 years. The Year Without a Summer, also known as the Poverty Year and Eighteen hundred and froze to death was 1816, in which severe summer climate abnormalities destroyed crops in Northern Europe and the American Northeast. The pyroclastic flow from the eruption reached out about 60km or 37.25 miles, according to the now restored TV.

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Dumbest question I've ever heard: A MSNBC reporter asks a representative at the St. Joseph Hospital where they were planning on taking the 12 miners – "Is the hospital prepared to work all night to help the miners?" What did he expect her to say?

"Uh, no sir, we close at 9pm and the remainder will have to wait on the lawn until we reopen at 6am." I kept watching and learned there had been a 'miscommunication'. Probably somebody in the Command Center who heard the rescue team report 12 alive just had to tell the families. The company claims they didn't. Only one survived and he had already been transported to the hospital, stabilized and retransferred to a level 1-trauma center with a collapsed lung. Bad deal all around. I feel for the families. False hope can be very cruel.

o

Back to the volcanic winter. There had been about 3 in the last 2,000-years so that more or less refutes the statement that they averaged one every 50,000-years. We were only in the 9th year of the new century and here we went again. There was no nuclear winter after the war with the Chinese because the total detonations didn't exceed 300mT. It did get cooler, however. Once our roofs were clear, I helped Ralph transfer their goods back to their house. There was still a light ash fall of maybe ½" a day. Ralph had a leaf blower and thought it would be enough to blow off further accumulations.

About 8 states were declared disaster areas, but California was the hardest hit, what with the caldera erupting and the San Andreas letting go between Ft. Tejon and ¾ of the way to San Francisco. Lots of liberals in California, folks, they were prepared. In fact, most of them went to the grocery store daily to buy something for dinner. A person couldn't be sure of the extent of the damage because we had to depend on reporters to tell us. I'd say Ridgecrest sustained 'minor' damage, 3 on a scale of 10.

What we had to deal with was, as usual, a loss of utilities including electricity, phone and water. I told you our house was old, it had its own well. Ralph's was newer and didn't. The best we could do was run a water hose over to their house. Ralph had a gasoline-fueled generator that was rated 9.1kw peak and 6.3kw average. Sound familiar? That's why she suggested I get Ralph to go to Chico with me. Time has shown that it always helps to have at least one neighbor on your side. You could always get surrounded by 50 alligators and you know what that would mean, right?

Right, you'd be up to your ass in alligators. For sure, the elephant gun would kill them, but 50?

## China Lake – Chapter 11

Ralph and Jean were doing fine with the singular exception of having low water pressure. You'd have thought by now that the phone company switching offices would have backup generators. Must have something to do with the number of generators that would take, as in hundreds or thousands. And, in California, the electrical utilities were always walking a fine line. They couldn't build nuclear generating plants and people opposed coal and oil, forcing them to use natural gas. It also take a while to build a new generating plant, thus only about 2 had come online since Arnold booted Gray. Arnold was out; even Maria couldn't get him reelected.

I have no idea why we didn't have water, no power for the pumps? We had converted everything back to propane for the umpteenth time. Ralph got jets and I loaned him the 10 100# bottles, about 225 gallons. The NAWC and Ridgecrest sort of fit together like a hand and glove. If you examine a map, you'll see that East Ridgecrest Boulevard, which eventually becomes Trona Road CA-178, is the southern border of the northern part of NAWC and clips off corners of the station on the way to Trona. Trona is one of those nice places to be from, as in away from. Couldn't say that if I hadn't been there.

I sort of snuck 2 disasters in together there, when Long Valley erupted, it triggered a release of locked energy on the San Andreas Fault, and the result was the so-called 'Big One'. Never say never. We came through ok and Jean had most of her things strapped down too. Always remember Forrest Gump's box of chocolates. Ridgecrest has its own police department and it seemed as if everything would be ok. They had everyone working 12-on/12-off. The Wal-Mart on the south side had a lot of stuff fall off the shelves, but they had reopened by the time we came out of the shelter and cleaned the roofs. Home Depot was also open, but neither Ralph nor I could see anything that needed repairs. The 60' schedule 40 steel pipes had pulled away from the eves, but they were still standing. We decided to shorten them to 30' each and I told Ralph he could have the leftover pipe.

That meant that Ralph needed clamps and I went along with him to Home Depot to get some bolts to replace the lag screws that had pulled out. The air felt, well 'gritty', and we decided to wear the disposable N-95 masks I had. I think those things are more intended to prevent you from spreading something than to prevent you from getting something. Several of the service stations had learned their lessons from WW III and had backup generators supplying power so they could pump fuel. While we were down below, I ran the Onan off the tanks that AmeriGas knew I had. Kern County was ready.

Yeah, right. Their assessment of the volcano risk was 'LOW'. While they acknowledged LVC, they ignored the magma pool under NAWC. Government employees had developed the risk assessment; maybe that explains it. Best of the best, right? Southern California Edison supplied our electricity and Pacific Gas and Electric our natural gas. Verizon was the phone company and the Indian Wells Valley Water District the water. The City of Ridgecrest provided Waste Water Treatment and 2 companies sold propane, AmeriGas Propane and Ridgecrest Sanitation, which also provided trash service. I believe I mentioned that cable TV came from Mediacom.

Note: Pick any community you've never lived in and try to figure out exactly what it would be like to live there. It ain't easy. The Chamber of Commerce website is the best source, but it was down for a day or two. I got out 101 pages without it. If I don't quite get it right, I'm sorry but I try.

Rules of 3s, right? If you have a small volcano, WW III, LVC erupts and you have the 'Big One", what's left? 5 more something's if the rule of 3s is correct. One thing I can say is that it most certainly is a good thing that we didn't have a Santa Ana wind condition, 57' plus. That little volcano that I never got to see didn't hurt anything so Ralph and I agree that maybe we should omit it from the count. I really like Ralph; he's pretty nice for a young (~50) guy. Besides, anyone with a few gold coins is either survival oriented or a shrewd investor. One of these days, I may go shoot the elephant gun or take Ralph's advice and buy and buy a Winchester Model 70, Safari Express in .458 Winchester Magnum. After I fire the first round, I'll walk back and tell you about the recoil. Ridgecrest does have an acute care hospital.

The really nice thing about Ridgecrest being nearly surround by NAWC is that you're either a major target or everyone leaves you alone. Trona was a mining town, if I recall, borax. In 1862 John W. Searles discovered Borax on the dry barren surface (Searles Lake), while prospecting for gold and silver with three other people in the slate mountain range. But the discovery went unrecognized.

After seeing Francis (Borax) Smith's operation of recovering Borax in Nevada in 1872, Mr. Searles realized the value of what he had discovered in Searles Lake. In 1873 John W. Searles staked a claim to 640 acres of lake and formed The San Bernardino Borax Mining Company. Mules were used to haul the Borax to San Pedro.

Ironically, in 1897 soon after John Searles' death The San Bernardino Borax Mining Company was sold to Pacific Borax Company, which was owned by Francis (Borax) Smith. Which shut down the Searles Lake operation.

Searles Lake and Trona has seen many changes.

In 1914 Trona Railway Company completed 31 miles of track to Trona from Searles Station junction with the Southern Pacific Railroad. American Trona Corp. established the company owned town of Trona.

A main residential street existed for a while, called "Tent City" because of the tent type houses that the residents lived in back then. Around 1916 a few houses were built for the upper management employees and their families of the plant (American Trona Corporation). Some of these houses are still standing and some are still being lived in on Panamint and Magnolia streets. The History House, which is open to the public at 83001 Panamint St., is one of the first houses built in Trona.

Today one of Trona's main sources of income is still that of mining operations, On March 18, 2004, all operations of IMC Chemicals were sold to Sun Capital Investments and the operations in Searles Valley renamed "Searles Valley Minerals, Inc." The small desert town of Trona holds a lot of history and offers modern living at an affordable price. Over the years not only has Trona preserved its history. With all the historical sites to see it has also grown and changed with the times.

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A few years after the end of World War II, Africa's professional hunters faced a growing dilemma – a shortage of ammo for their fine British double rifles. Most ammo on hand was from prewar stock, and Kynoch, the sole source of ammo for the big stoppers, had decided to stop production for most of them.

Just when the shortage was becoming critical, Winchester came to the rescue in 1956 with the revolutionary .458 Winchester Magnum – an honest-to-God elephant caliber. It was chambered in the Winchester Model 70 African bolt action, and the combination became an instant success among African professionals and their clients alike. Today it's a reasonable certainty that more African professional hunters use a .458 than any other cartridge.

The introduction of the .458 was a watershed event that changed the face of American sporting arms forever, and it had almost nothing to do with the cartridge's demonstrated effectiveness on African game.

The impact of the .458 was that it sired a new class of American magnum cartridges suitable for .30-06-length actions, including the .338 and .264 Winchester Magnums, and their success spawned the 7mm Remington Magnum. The high muzzle velocity offered by these new cartridges caught the imagination of American shooters, and "magnumania" was born.

Also, the .458 had braggin' rights as America's bigbore "stopper caliber," suitable for the heavyweight division of Africa's Big Five dangerous-game animals. A 500-grain bullet at between 2,000 and 2,100 fps made the .458 Magnum nearly equal to the .470 Nitro Express, a classic double-rifle cartridge that launches a 500-grain bullet at about 2,150 fps. Winchester had problems with the stocks cracking due to the massive recoil.

The first two shots from a good bolt action chambered for the .458 Mag were a bit slower than a "quick left and right" from a double, however; many professionals preferred "three shots in the magazine and one up the pipe" with a bolt action. This additional firepower could be crucial during culling operations or in the event of a charge.

Over the years, detractors have claimed that the .458 has serious drawbacks as a stopper. One argument says the .458 is a bit short on powder capacity because of its 2 1/2inch case length. The result, it is said, is that in the real world the .458 falls far short of its advertised muzzle velocity, delivering only 1,900 fps or so in most rifles.

A second criticism talks about "squib loads" that barely penetrate the thick, tough skin of a Cape buffalo or other "big heavies." This is attributed to compressed powder charges that clump together and burn erratically.

The critics' answer in both cases is a cartridge that has enough additional case capacity to achieve a significantly higher muzzle velocity without a highly compressed powder charge, such as the somewhat longer .458 Lott. Without doubt, the .458 Lott is a fine stopper, and you might prefer the additional velocity, energy and recoil. However, my range testing shows that you need not feel poorly armed if you carry a .458 Winchester after Cape buffalo, elephant or any other big, truculent beast.

My test rifle was a Ruger No. 1H with the standard 24-inch barrel. The rifle had started out as a barreled action, and a previous owner had mated it to an extremely plain walnut stock. It doesn't look like much, but it shoots just fine.

I wired the test rifle for my Oehler Model 43 Personal Ballistics Laboratory. I then fired factory ammo to obtain pressure baseline data. Five-round averages for both loads were slightly higher than advertised velocities. The Winchester 510-grain softpoints launched at 2,070 fps (30 fps over spec), and the Federal 500-grain Trophy Bonded 500-grain solids went slightly higher–2,127 fps instead of 2,090.

When you handload for the .458, seating depth is your controlling factor. The .458's prodigious recoil makes it necessary to crimp heavily into the bullet's cannelure. Depending on which brand and weight of bullet you use, this might reduce the available powder capacity for a given load.

Bullet weights range from 300 grains up to 600 grains for the Barnes Original RNSP. However, the lighter bullets are designed to be used in .45-70 or even lighter cartridges and may not yield optimum performance in the .458. For this reason, loads listed here begin with the excellent 350-grain bullets from Barnes and Hornady.

The .458 Winchester Magnum is considerably more powerful than necessary for North American game. But more than one Alaskan bear guide carries a .458 to back up his clients in the alder tangles of the Alaskan peninsula or Kodiak Island. For other game such as American bison, the .458 is an excellent stand-in for the old 19th century buffalo calibers.

If you are a dyed-in-the-wool gun crank, you need a .458 even if you never expect to go on safari on the Dark Continent. It has the mystique of adventure, so that just touching off a few solids at the local shooting range will draw a crowd. Some shooters prefer to steer clear of heavy-recoiling calibers, but like those who ride mechanical bulls, others will enjoy the challenge of trying to tame the beast. Educate first; entertain second. He didn't mention the energy, muzzle =  $\sim$ 4,712 ft-lbs for the Winchester 510 gr. Super-X Soft Point, 2.356 tons! Considered to be the world's largest, most powerful shoulder-fired cartridge, the .460 shoots a 500 grain bullet at 2,600 fps, delivering an incredible 7,507 foot pounds of muzzle energy. That's 50 percent more energy than the .458 Winchester. Heavy recoil to be sure, but few hunters who need to stop a charging Rhino or Cape Buffalo complain. Nearly four tons of smashing power make the .460 the only choice for Africa's most dangerous game. If I ever shoot one, I'll hop a plane and come back to tell you about the recoil. The .458 Lott delivers 2,300-fps velocities from 24-inch-barreled rifles, which in turn produces 6,020 ft-lbs of muzzle energy – 1,400 ft-lbs more than the .458 Winchester. Ruger's M77 .458 Lott is an outstanding choice for dangerous game.

Why not a M82A1? It might kill an elephant, LOL. Do I need a special license or anything to own a .50? No. If you meet the requirements to own a firearm, you may own a .50 BMG. Certain areas (California) may be an exception - might I suggest moving to the United States of America? That's a quote from the web; so is the following: Iran announced yesterday that it would resume atomic fuel research and development next week, raising the specter of a new showdown with the West, which suspects that Tehran wants nuclear technology to build bombs. Nah, you don't need military style weapons, the US is in no danger. Who doesn't hate the US? Probably Russia, they have as many nukes as we do.

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Hi, my name is Gary and I'm a dyed-in-the-wool gun crank. My feelings are so strong that I'm a Patron member of the NRA and have been a Life member since 1964. I believe in the 2nd Amendment and I know what it says. It says in relevant part, 'the right of the people to keep and bear Arms shall not be infringed," and, that's a direct quote! Nowhere does it say, 'except for'... It doesn't say, no elephant guns, nor does it say no automatic weapons. States having militias has nothing to do with that individual right. So, when one chooses to live in California, one has to make a choice as to whether or not to obey the California law.

It also says, "A well-regulated Militia, being necessary to the security of a free State," but whether or not a state chooses to have a militia, is up to the individual state, see the 10th Amendment. Somehow that was interpreted to allow everyone to control the second clause. I'll let you know when they assign me to a cell. God bless the Bill of Rights and darn them for not making it more clear. It's clearly a case of us giving them an inch and them taking a mile. People will naturally ask who needs a machine gun. It doesn't say that you can only have one if you need it, but that's been interpreted too. The current answer is cops and soldiers and a few people lucky enough to live in a state where you can have one with \$200 for the stamp and infinite patience.

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.458 Winchester Magnum ammo is cheaper than .375 H&H Magnum, \$52.75 v. \$66.40 for 20-rounds. The .375 has 4,275ft-lbs at 2,670fps in the 270-grain bullet. At \$1,100, I had to have one. It was a shame that Ron's .375 H&H Magnum wasn't a Winchester model 70, but an English import. I really didn't know if that was good or bad.

"Honey, how are we on money?"

"I'd sure like to get a Winchester model 70."

"You should have kept the one you had. What caliber was it?"

".30-06."

"I can see why you'd want one, that was a nice rifle."

"They cost a bit more now."

"How much this time?"

"\$1,100, but it's a hunting rifle and the ammo is cheaper than the .375 H&H Magnum."

"Steep."

"I told you the price had gone up."

"What can you hunt with it?"

"Any large game animals on the North American continent (Bradley Fighting Vehicles)."

"Grizzlies?"

"Absolutely."

"Well... ok, but don't buy much ammo. Limit yourself to five boxes."

The rifle went for \$990 and the ammo for \$40 a box from Sandy. There was 8.25% sales tax and a \$10 fee for the instant background check. Grand total, \$1,298.18. I could pick it up in 5 business days. Who needs a .50 BMG when he has a .458 Winchester Magnum? If Sandy had been in a better mood, I might have gotten a 20% instead of a 10% discount on the rifle. She did ask what I was going to shoot with the 'cannon' and I told just the usual dessert stuff, like jackrabbits. She told me I was crazier than Ron. I replied, 'thank you'.

One of the reasons I told you who the utility companies in Ridgecrest were was to point out something a bit unusual. PG&E sells the gas and SCE sells the electricity. Usually, it's one or the other for both; PG&E covers northern California and SCE covers southern

California. The gas company in southern California is Southern California Gas Company (aka The Gas Company) and is affiliated with Edison. In a majority of communities it's either PG&E for everything or Edison and The Gas Company. PG&E owns Diablo Canyon and Edison owns 75% of San Onofre. California has > 13,000 commercial wind turbines and is phasing out a program that initially paid about half the cost of a 10kw wind turbine for individuals.

It appeared that we were burning propane faster than the money was coming in. This double disaster created delivery problems we hadn't anticipated. My best guess was that we had enough for about 7½ months instead of the anticipated 281 days. This was unlike the war and there was no way I could get away with acquiring money the way I had previously. We could avoid buying food for a while and that would help, but sooner or later without the natural gas being turned back on, we'd lose lights and heat. We had kerosene lamps and those 3 cords of wood but cooking in the fireplace wasn't my first choice and was probably Sharon's last choice.

My bride suggested putting in a wind turbine and maybe some solar panels. Then I explained what it would cost and she changed the subject. A solar array requires panels, wiring, chargers, inverters and batteries. A wind turbine gave you a choice and most of the folks down in Palmdale that had them, didn't add chargers, inverters and batteries. The downside of selling the excess electricity to Edison was that they didn't pay you for it. Instead, they banked it against future use. For this reason alone, most of the private turbines in Palmdale were 10kw.

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I hate to change the subject but I just learned something today I didn't know. American soldiers who survive an attack in Iraq and are evacuated to Germany aren't counted as Iraq fatalities if the die in Germany. According to an officer who is home on leave from Iraq, they count them as training casualties.

Like Roberto Duran said, "No Mas".

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